SETUP & OPERATION MANUAL

17" WOOD / METAL BANDSAW

MODEL #90-320

FEATURES

- Designed for excellent results, for both wood and metal cutting applications.
- Select between metal & wood cutting speed ranges with a simple belt position change.
- Dynamically balanced cast-iron wheels.
- Solid, high quality, precision-machined, ribbed cast-iron table with 5° left and 45° right tilting action.
- New and improved! Now includes upgraded 90-075B deluxe Excalibur rip fence system.
- Quick release blade tension lever.
- Dual/opposing blade guide bearing system.
- 2 built-in 4" diameter dust chutes for better dust collection.
- Quick easy adjust variable speed control and digital display for blade speed in FEET/MIN.
- Large paddle style stop switch with lock-out safety pin and lock-out switch with key for main power.
- Miter gauge, laser line marker and work-light included.

SPECIFICATIONS

WHEEL SIZE
17" (430 MM)

WHEEL SPEED
WOOD: 122 - 810 RPM / **METAL:** 23 - 146 RPM

BLADE WIDTH
1/8" TO 1" (3 TO 25.4 MM)

BLADE LENGTH
131 1/2" (3340 MM)

TABLE SIZE
23 1/2" X 17" (600 X 430 MM)

TABLE TILT
0° TO 45° (RIGHT) / 0° TO 5° (LEFT)

TABLE HEIGHT
39 3/4" (1010 MM)

MAXIMUM DEPTH OF CUT
11 1/2" (295 MM)

MAXIMUM WIDTH OF CUT
16 1/4" (410 MM)

MAXIMUM CUTTING (RIP FENCE)
14 5/8" (370 MM)

DUST PORT (2)
4" (102 MM)

BLADE SPEED
WOOD 540 - 3600 FPM (165 - 1100 MPM)
METAL 100 - 650 FPM (30 - 200 MPM)

BASE DIMENSIONS (L X W)
29 1/2" X 17 3/4" (749 X 451 MM)

MOTOR
2 HP, 220 V, 3 PH, 7 A)

INPUT POWER
220 V, 1 PH

WEIGHT
440 LBS (200 KG)

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THANK YOU for choosing this General® International model 90-320 - 17" Wood / Metal Bandsaw. This bandsaw has been carefully tested and inspected before shipment and if properly used and maintained, will provide you with years of reliable service. For your safety, as well as to ensure optimum performance and trouble-free operation, and to get the most from your investment, please take the time to read this manual before assembling, installing and operating the unit.

The manual's purpose is to familiarize you with the safe operation, basic function, and features of this bandsaw as well as the set-up, maintenance and identification of its parts and components. This manual is not intended as a substitute for formal woodworking instruction, nor to offer the user instruction in the craft of woodworking. If you are not sure about the safety of performing a certain operation or procedure, do not proceed until you can confirm, from knowledgeable and qualified sources, that it is safe to do so.

Once you've read through these instructions, keep this manual handy for future reference.

Disclaimer: The information and specifications in this manual pertain to the unit as it was supplied from the factory at the time of printing. Because we are committed to making constant improvements, General® International reserves the right to make changes to components, parts or features of this unit as deemed necessary, without prior notice and without obligation to install any such changes on previously delivered units. Reasonable care is taken at the factory to ensure that the specifications and information in this manual corresponds with that of the unit with which it was supplied. However, special orders and "after factory" modifications may render some or all information in this manual inapplicable to your machine. Further, as several generations of this model of bandsaw and several versions of this manual may be in circulation, if you own an earlier or later version of this unit, this manual may not depict your machine exactly. If you have any doubts or questions contact your retailer or our support line with the model and serial number of your unit for clarification.

GENERAL® & GENERAL® INTERNATIONAL WARRANTY

All component parts of General®, General® International and Excalibur by General International ® products are carefully inspected during all stages of production and each unit is thoroughly inspected upon completion of assembly.

Limited Lifetime Warranty

Because of our commitment to quality and customer satisfaction, General® and General® International agree to repair or replace any part or component which upon examination, proves to be defective in either workmanship or material to the original purchaser for the life of the tool. *However, the Limited Lifetime Warranty does not cover any product used for professionnal or commercial production purposes nor for industrial or educational applications. Such cases are covered by our Standard 2-year Limited Warranty only. The Limited Lifetime Warranty is also subject to the "Conditions and Exceptions" as listed below.*

Standard 2-Year Limited Warranty

All products not covered by our lifetime warranty including products used in commercial, industrial and educational applications are warranted for a period of 2 years (24 months) from the date of purchase. General® and General® International agree to repair or replace any part or component which upon examination, proves to be defective in either workmanship or material to the original purchaser during this 2-year warranty period, subject to the "conditions and exceptions" as listed below.

To file a Claim

To file a claim under our Standard 2-year Limited Warranty or under our Limited Lifetime Warranty, all defective parts, components or machinery must be returned freight or postage prepaid to General® International, or to a nearby distributor, repair center or other location designated by General® International. For further details call our service department at 1-888-949-1161 or your local distributor for assistance when filing your claim.

Along with the return of the product being claimed for warranty, a copy of the original proof of purchase and a "letter of claim" must be included (a warranty claim form can also be used and can be obtained, upon request, from General® International or an authorized distributor) clearly stating the model and serial number of the unit (if applicable) and including an explanation of the complaint or presumed defect in material or workmanship.

CONDITIONS AND EXCEPTIONS:

This coverage is extended to the original purchaser only. Prior warranty registration is not required but documented proof of purchase i.e. a copy of original sales invoice or receipt showing the date and location of the purchase as well as the purchase price paid, must be provided at the time of claim.

Warranty does not include failures, breakage or defects deemed after inspection by General® or General® International to have been directly or indirectly caused by or resulting from; improper use, or lack of or improper maintenance, misuse or abuse, negligence, accidents, damage in handling or transport, or normal wear and tear of any generally considered consumable parts or components.

Repairs made without the written consent of General® International will void all warranty.

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RULES FOR SAFE OPERATION

To help ensure safe operation, please take a moment to learn the machine's applications and limitations, as well as potential hazards. General® International disclaims any real or implied warranty and holds itself harmless for any injury that may result from improper use of its equipment.

1. For your own safety read the instruction manual before operating this band saw.
2. This tool is for indoor use only. Do not expose to rain or use in wet or damp locations.
3. Do not operate this bandsaw when tired, distracted, or under the effects of drugs, alcohol or any medication that impairs reflexes or alertness.
4. The working area should be well lit, clean and free of debris.
5. Keep children and visitors at a safe distance when the bandsaw is in operation; do not permit them to operate the bandsaw.
6. Use right tool. Don't force tool or attachment to do a job for which it was not designed.
7. Childproof and tamper proof your shop and all machinery with locks, master electrical switches and switch keys, to prevent unauthorized or unsupervised use.
8. **Stay alert!** Give your work your undivided attention. Even a momentary distraction can lead to serious injury.
9. Fine particulate dust is a carcinogen that can be hazardous to health. Work in a well-ventilated area and whenever possible use a dust collector. Wear face, eye, ear, respiratory and body protection devices.
10. Always use safety glasses. Also use face protection or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
11. Do not wear loose clothing, gloves, bracelets, necklaces or other jewelry while the bandsaw is in operation. Wear protective hair covering to contain long hair and wear non-slip footwear.
12. Be sure that adjusting wrenches, tools, drinks and other clutter are removed from the machine and/or the table surface before operating.
13. Keep hands well away from blades and all moving parts. Use a brush, not hands, to clear away chips and dust.
14. Do not remove jammed cutoff pieces until blade has stopped.
15. Adjust and position upper and lower blade guides before starting to cut. Upper blade guide should be adjusted to approximately 1/8" above the material to be cut.
16. Adjust blade tension and tracking before starting to cut.
17. Saw teeth must point down toward the table.
18. Be sure that the blade has gained full operating speed before starting to cut.
19. Always use a clean, properly sharpened blade. Dirty or dull blades are unsafe and can lead to accidents.
20. Use suitable work piece support if the work piece does not have a flat surface.
21. Hold material firmly against the table.
19. Do not work on long stock without adequate support on the out feed end of the table.
20. If using a power feeder, stop the feeder before stopping the bandsaw.
21. Secure work. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
22. Do not push or force stock into the blade. The bandsaw will perform better and more safely when working at the rate for which it was designed.
23. Avoid working from awkward or off balance positions. Do not overreach and keep both feet on floor.
24. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning be sure it is properly re-attached before using the tool again.
25. Maintain proper adjustment of blade tension, blade guides, and thrust bearings.
26. Always disconnect the tool from the power source before servicing or changing accessories such as blades, or before performing any maintenance or cleaning, or if the machine will be left unattended.

RULES FOR SAFE OPERATION (CONT'D)

To help ensure safe operation, please take a moment to learn the machine's applications and limitations, as well as potential hazards. General® International disclaims any real or implied warranty and holds itself harmless for any injury that may result from improper use of its equipment.

27. Make sure that the switch is in the "OFF" position before plugging in the power cord.

28 Never leave the machine unattended while it is running or with the power on. Don't leave tool until it comes to a complete stop

29. Use of parts and accessories NOT recommended by GENERAL® INTERNATIONAL may result in equipment malfunction or risk of injury.

30. Never stand on machinery. Serious injury could result if the tool is tipped over or if the cutting tool is unintentionally contacted.

31. Make sure the tool is properly grounded. If equipped with a 3-prong plug it should be used with a three-pole receptacle. Never remove the third prong.

32. Do not use this bandsaw for other than its intended use. If used for other purposes, GENERAL® INTERNATIONAL disclaims any real implied warranty and holds itself harmless for any injury, which may result from that use.

33. Regularly inspect the machine for signs of damage or wear. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation.

34. Direction of feed. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

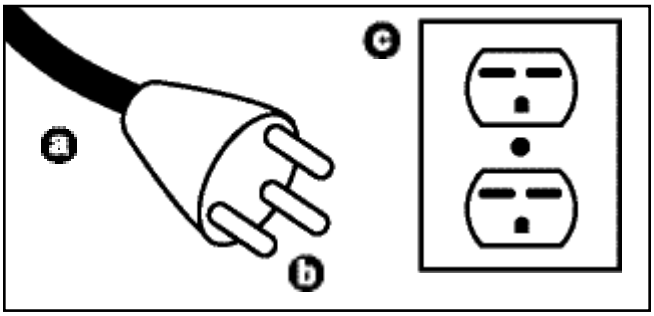
35. The installer shall follow local regulations and National Electrical Code, ANSI/NFPA 70 installation requirements.

36. This tool should be connected to a grounded metal permanent wiring system; or to a system having an equipment-grounding conductor.

ELECTRICAL REQUIREMENTS

BEFORE CONNECTING THE MACHINE TO THE POWER SOURCE, VERIFY THAT THE VOLTAGE OF YOUR POWER SUPPLY CORRESPONDS WITH THE VOLTAGE SPECIFIED ON THE MOTOR I.D. NAMEPLATE. A POWER SOURCE WITH GREATER VOLTAGE THAN NEEDED CAN RESULT IN SERIOUS INJURY TO THE USER AS WELL AS DAMAGE TO THE MACHINE. IF IN DOUBT, CONTACT A QUALIFIED ELECTRICIAN BEFORE CONNECTING TO THE POWER SOURCE.

THIS TOOL IS FOR INDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR USE IN WET OR DAMP LOCATIONS.



GROUNDING INSTRUCTIONS

In the event of an electrical malfunction or short circuit, grounding reduces the risk of electric shock to the operator. The motor of this machine is wired for 220V single phase operation and is equipped with a 3-conductor cord (a) and a 3-prong grounded plug (b) to fit a matching grounding type receptacle (c).

DO NOT MODIFY THE PLUG PROVIDED ! If it will not fit your receptacle, have the proper receptacle installed by a qualified electrician.

CHECK with a qualified electrician or service person if you do not completely understand these grounding instructions, or if you are not sure the tool is properly grounded.

CIRCUIT CAPACITY

Make sure that the wires in your circuit are capable of handling the amperage draw from your machine, as well as any other machines that could be operating on the same circuit. If you are unsure, consult a qualified electrician. If the circuit breaker trips or the fuse blows regularly, your machine may be operating on a circuit that is close to its amperage draw capacity. However, if an unusual amperage draw does not exist and a power failure still occurs, contact a qualified technician or our service department.

EXTENSION CORDS

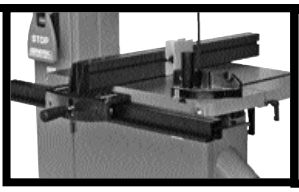
The use of an extension cord is not generally recommended for 220V equipment. If you find it necessary, use only 3-wire extension cords that have 3-prong grounding plug and a matching 3-pole receptacle that accepts the tool's plug. Repair or replace a damaged extension cord or plug immediately.

If you find it necessary to use an extension cord with your machine make sure the cord rating is suitable for the amperage listed on the motor I.D. plate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The accompanying chart shows the correct size extension cord to be used based on cord length and motor I.D. plate amp rating. If in doubt, use the next heavier gauge. The smaller the number, the heavier the gauge.

TABLE - MINIMUM GAUGE FOR CORD

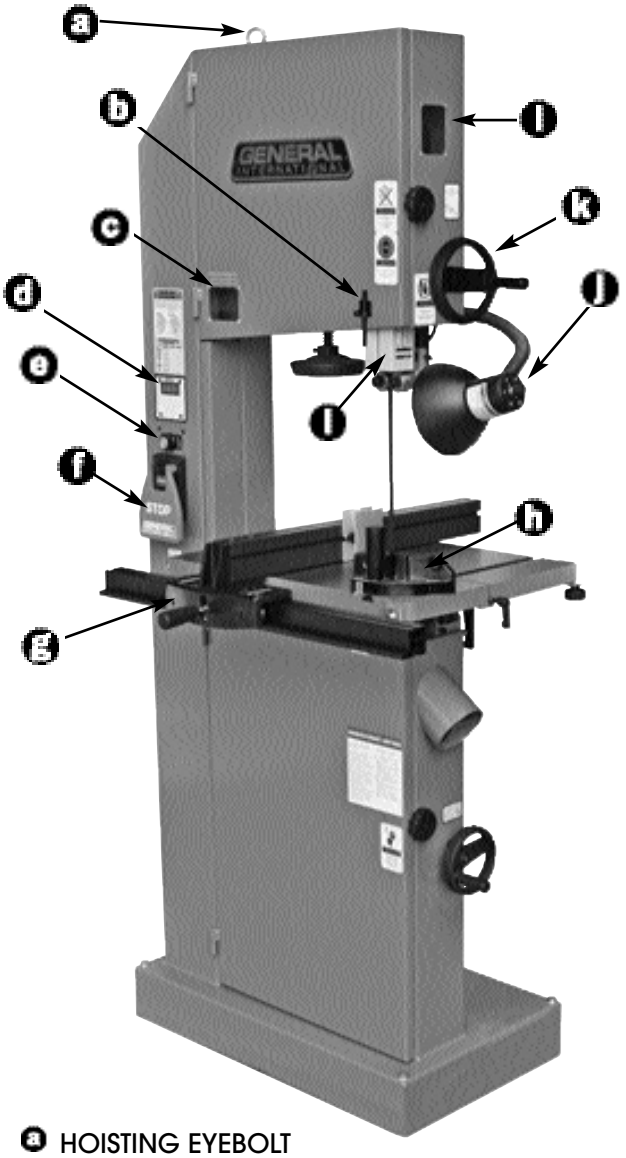
AMPERE RATING	TOTAL LENGTH OF CORD IN FEET				
	220 VOLTS	50 FEET	100 FEET	200 FEET	300 FEET
	AWG				
< 5	------->	18	16	16	14
6 TO 10	------->	18	16	14	12
10 TO 12	------->	16	16	14	12
12 TO 16	------->	14	12	* NR	* NR

*** NR = Not Recommended**



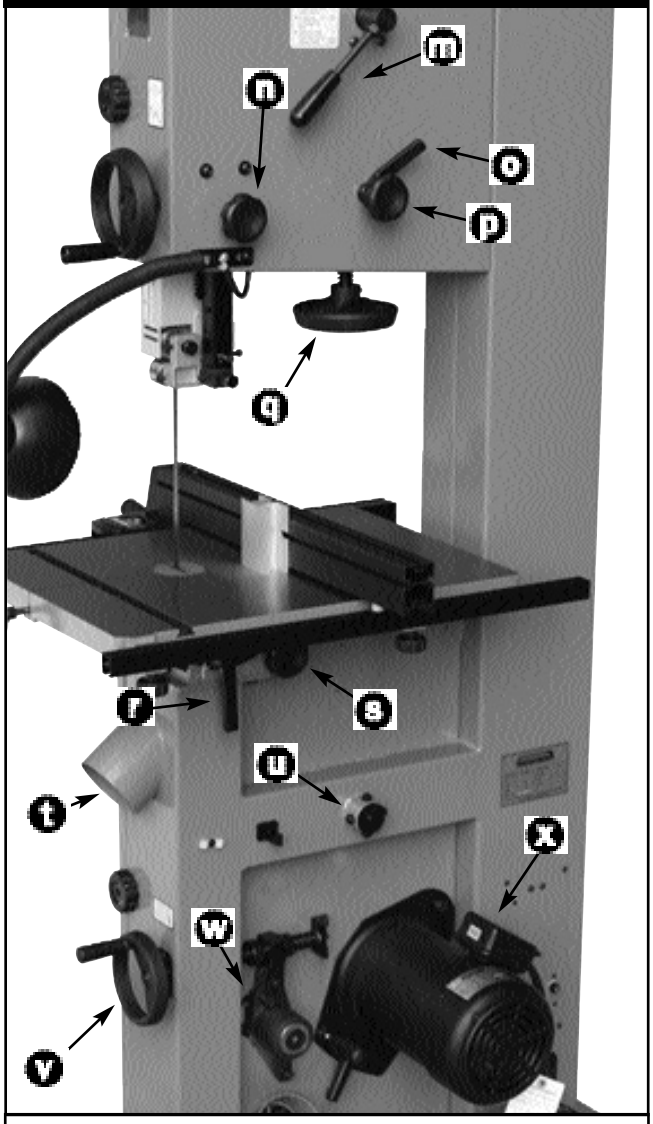
IDENTIFICATION OF MAIN PARTS AND COMPONENTS

FRONT VIEW



- a HOISTING EYEBOLT
- b LASER LINE MARKER
- c BLADE TENSION WINDOW
- d DIGITAL SPEED DISPLAY
- e VARIABLE SPEED CONTROL KNOB
- f ON/OFF SWITCH WITH SAFETY KEY
- g RIP FENCE SYSTEM
- h MITER GAUGE
- i BLADE GUARD
- j WORKLIGHT
- k BLADE GUARD HEIGHT ADJUSTMENT HAND WHEEL
- l BLADE TRACKING WINDOW

REAR VIEW



- m BLADE TENSION QUICK RELEASE LEVER
- n BLADE GUARD LOCK KNOB
- o BLADE TRACKING ADJUSTMENT LEVER
- p BLADE TRACKING ADJUSTMENT KNOB
- q BLADE TENSION ADJUSTMENT HAND WHEEL
- r TABLE TILT ADJUSTMENT LOCK LEVER
- s TABLE TILT ADJUSTMENT KNOB
- t DUST CHUTE
- u LOWER WHEEL TILT ADJUSTMENT SCREWS
- v BELT TENSION ADJUSTMENT HAND WHEEL
- w BELT TENSION ADJUSTMENT MECHANISM
- x MOTOR

BASIC FUNCTIONS

This model 90-320 electronic variable speed 17" bandsaw is designed to allow the user to adjust the speed of the blade to suit different wood or metal cutting needs. This unit includes all of the basic functions and features found on similar size bandsaws.

Featuring a front mounted digital blade speed display (in feet per minute) the unit is equipped with two speed ranges. By simply changing the positioning of the drive belt from one set of pulleys to the other the user can select a speed range, Metal (100-650 FPM) or Wood (540-3600 FPM), depending on the cutting application. The speed control adjustment knob allows the user to dial in the required speed within each speed range.

The 90-320 is designed to accommodate both wood and metal cutting blades from 1/8" – 1" in width and is supplied with one 1/2" general purpose wood cutting blade (factory installed) and one 1/2" general purpose metal cutting blade. Ideal blade length for the model 90-320 is 131 1/2" (3340mm).

Note: Generally speaking, because the upper wheel height is somewhat adjustable (to allow for blade tensioning), a blade length variation of plus or minus 1/2" from the "ideal blade length" can be accommodated.

Maximum inboard width of cut (space between the blade and the body of the saw) is 16 1/4".

For cutting thicker stock or resawing, the maximum depth of cut (or max. workpiece height) is 11 1/2".

An adjustable rip fence is supplied to serve as a straightedge to guide the workpiece for longer rip cuts. The fence can easily be removed and set aside when not required, for example when making curved cuts.

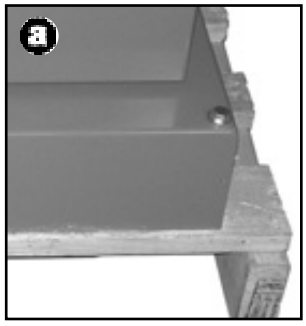
LIFTING AND HANDLING THE MACHINE

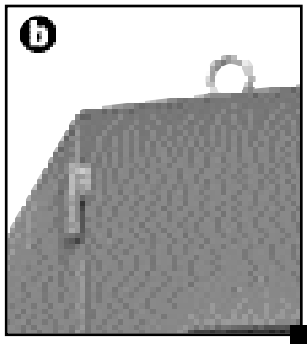
This model 90-320 17" Wood/Metal Bandsaw is very heavy. Do not over-exert. A hoist or forklift with chains will be needed for the following step.

To limit the risk of serious injury or damage to the machine, any equipment used to lift or move this machine (hoist or forklift) should have a rated capacity in excess 440lbs (200kg)

To limit the potential for damage in transport, this bandsaw is shipped from the factory bolted to its crate in the vertical position. With a forklift or hydraulic pallet jack, move the entire crate as close to the final installation location as possible, and then uncrate the saw and remove the screws that secure it to the crate ⓐ.

A hoisting eyebolt ⓑ is factory installed on the top of the saw frame to facilitate lifting and setting the saw down. Make sure to use an appropriate capacity hoist or forklift with chains properly secured to the hoisting eyebolt and lift the saw from the crate and carefully set it down in the desired location.





UNPACKING

Carefully unpack and remove the unit and its components from its shipping container and check for missing or damaged items as per the list of contents below.

NOTE: Please report any damaged or missing items to your GENERAL® INTERNATIONAL distributor immediately.

LIST OF CONTENTS **QTY**

BOX 1 - EXCALIBUR RIP FENCE

Note: Deluxe Excalibur Universal rip fence system is packed separately. Refer to the manual supplied in the box with Excalibur rip fence for complete list of contents.

*SAW, TABLE & OTHER COMPONENTS**
The other components are stored inside the lower cabinet to prevent damage in shipping.

- (h) 17" WOOD / METAL CUTTING BANDSAW 1
  (WITH 1/2" X 6 TPI WOOD CUTTING BLADE INSTALLED ON)
- (j) BANDSAW TABLE 1
- (j) V-BELT (A-27) 1
- (k) 1/2" X 10 TPI METAL CUTTING BLADE 1
- (l) MITER GAUGE 1
- (m) BLADE GUARD HEIGHT ADJUSTMENT HAND WHEEL .1
- (n) LOCK-OUT SWICH KEY 2
- (o) SAFETY LOCKING PIN 1
- (p) HEX HEAD BOLT 4
- (q) FLAT WASHER 4
- (r) LOCK WASHER 4
- (s) TABLE STOP BOLT 1
- (t) STOP BOLT JAM NUT 1
- (u) 8 MM ALLEN KEY 1
- (v) 5 MM ALLEN KEY 1
- (w) 10 - 13 MM OPEN END WRENCH 1

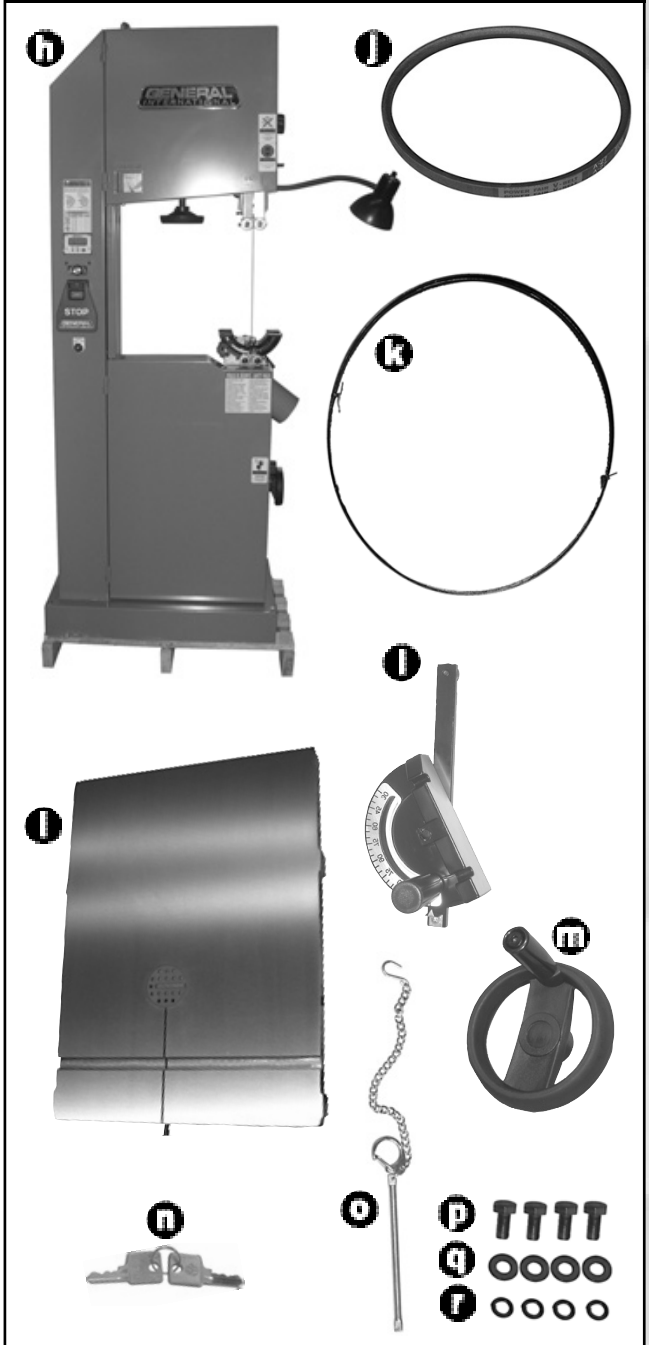
BOX 2 - LASER LINE MARKER (INSIDE LOWER CABINET)

- (A) LASER LINE MARKER 1
- (B) MOUNTING BRACKET 1
- (C) BUTTON HEAD BOLT (SHORT) 1
- (D) BUTTON HEAD BOLT (LONG) 1
- (E) SOCKET SCREW 1
- (F) FLANGED NUT 1
- (G) 3 MM ALLEN KEY 1

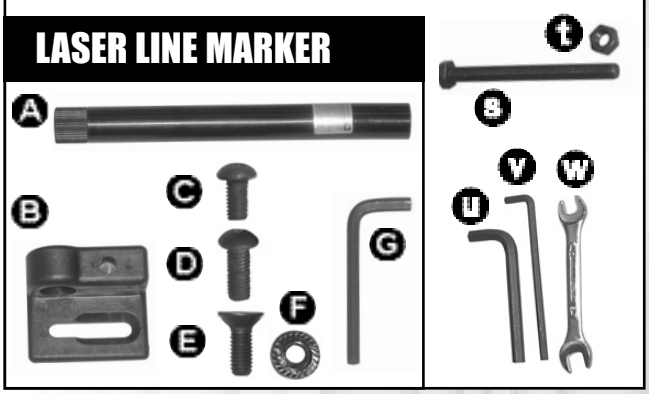
ADDITIONAL REQUIREMENTS FOR SET UP

- 6 mm allen key
- Combination square

SAW, TABLE & OTHER COMPONENTS*



LASER LINE MARKER



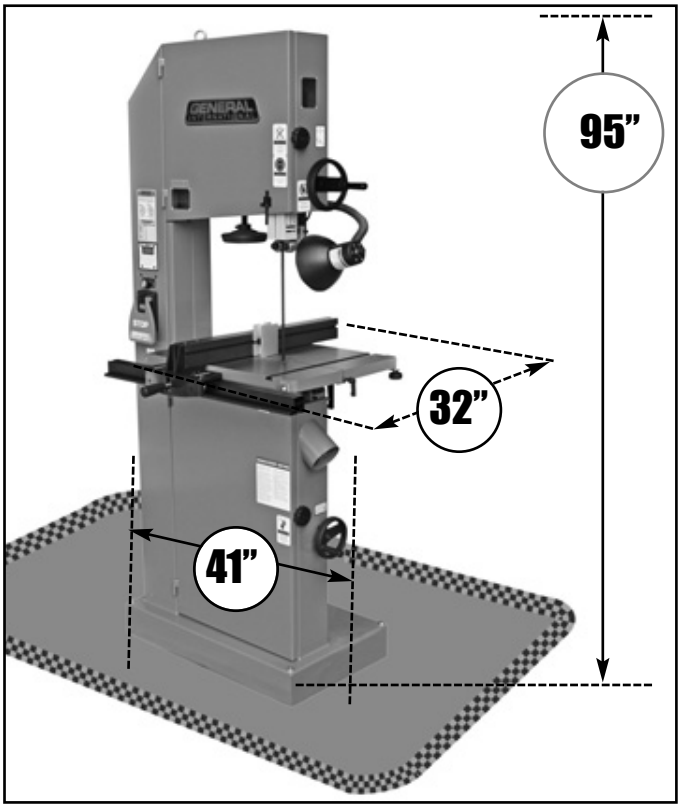
PLACEMENT WITHIN THE SHOP / ESTABLISHING A SAFETY ZONE

PLACEMENT WITHIN THE SHOP

This machine should be installed and operated only on a solid, flat and stable floor that is able to support the weight of the bandsaw 440 lbs (200 kg) and the operator. Using the dimensions shown as a guideline, plan for placement within your shop that will allow the operator to work unencumbered and unobstructed by foot traffic (either passing shop visitors or other shop workers) or other tools or machinery.

ESTABLISHING A SAFETY ZONE

For shops with frequent visitors or multiple operators, it is advisable to establish a Safety Zone around shop machi-nery. A clearly defined "no-go" zone on the floor around each machine can help avoid accidents that could cause injury to either the operator or the shop visitor. It is advi-sable to take a few moments to either paint (using non-slip paint) or using tape, define on the floor the limits or perimeter of each machines safety zone. Take steps to ensure that all operators and shop visitors are aware that these areas are off limits whenever a machine is running for everyone but the individual operating the unit.



CLEAN UP

The protective coating on the saw table prevents rust from forming during shipping and storage. Remove it by rubbing with a rag dipped in kerosene, mineral spirits or paint thinner. (Dispose of potentially flammable solvent-soaked rags according to manufacturer's safety recommendations.)

A putty knife, held flat to avoid scratching the surface, may also be used to scrape off the coating followed by clean-up with solvent. Avoid rubbing the saw's painted surfaces, as many solvent-based products will remo-ve paint.

To prevent rust, apply a light coating of paste wax or use regular applications of any after-market surface protectant or rust inhibitor.

Tip: With a screw driver, push a solvent-saturated rag into the T-slot to remove the grease.

ASSEMBLY INSTRUCTIONS

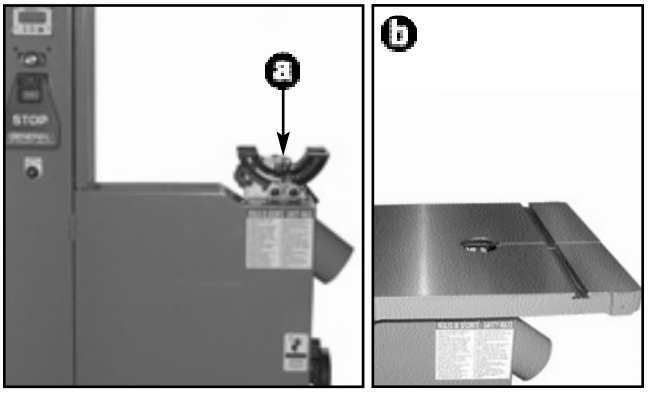
For your convenience this bandsaw is shipped from the factory partially assembled and requires only minimal assembly and set up before being put into service.

Serious personal injury could occur if you connect the machine to the power source before you have completed the installation and assembly steps. DO NOT connect the machine to the power source until instructed to do so.

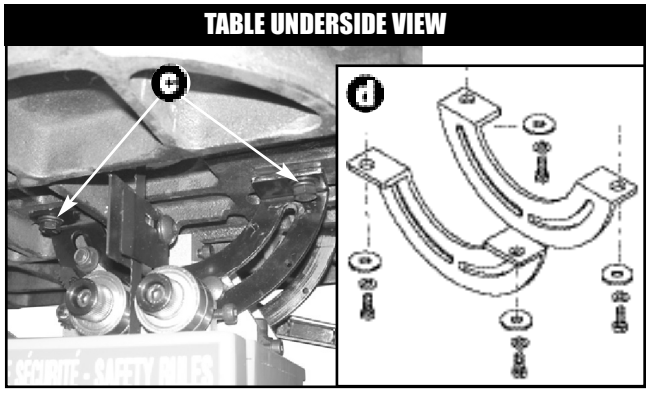
INSTALL THE TABLE

1. ***To limit the risk of damage to the saw blade or frame, remove the blade. Follow the instructions in section "Blade Clearance" on page 17, then remove the blade as instructed in section "Removing/Installing the blade" on page 18.***

This bandsaw table is heavy. Do not over-exert. The help of an assistant will be needed for the following step.



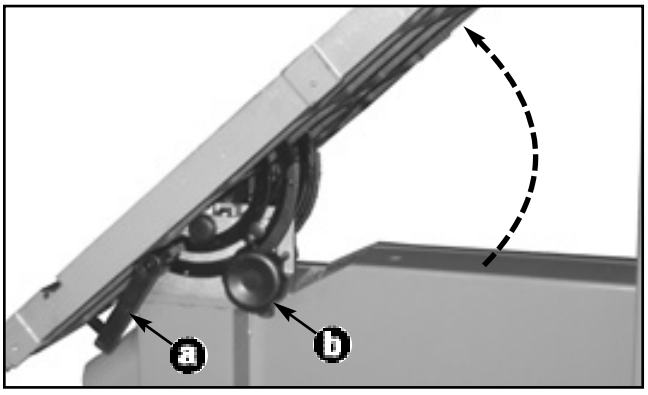
2. Gently lower the table onto the table tilt trunnion ⓐ, with the table slots oriented as shown ⓑ.



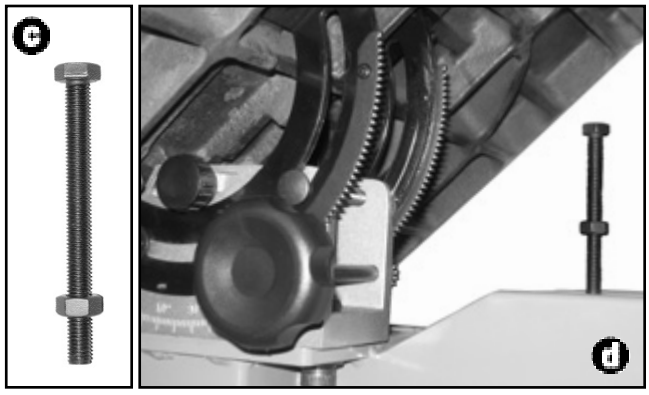
3. Using the supplied 10 - 13 open end wrench, secure the table to the trunnions with the 4 hex head bolts, lock washers and flat washers ⓒ, in the assembly order shown in ⓓ.

4. Re-install the blade as instructed on page 19.

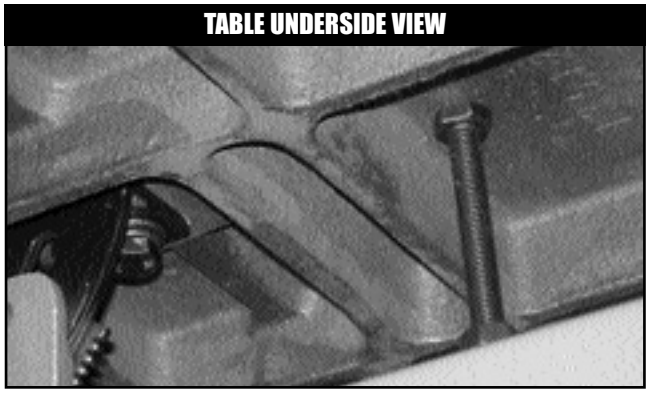
INSTALL AND ADJUST THE 90° TABLE STOP BOLT



1. Loosen the locking lever ⓐ then turn the adjustment knob ⓑ to tilt the table upwards as shown.

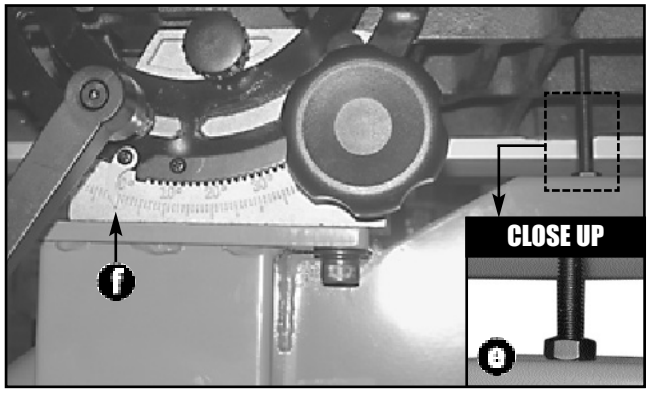


2. Thread the jam nut on the stop bolt ⓒ then thread the bolt in the theaded hole located on the saw cabinet ⓓ, 7 or 8 turns.



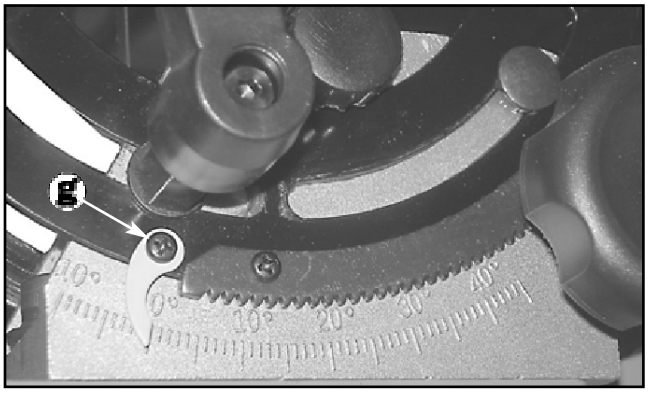
3. Lower the table until it sits on top of the bolt.

4. Place a combination square flat on the table with the heel of the square flat against the saw blade.



3. Level the table until it is exactly 90° to the saw blade then tighten the jam nut against the saw cabinet **o**.

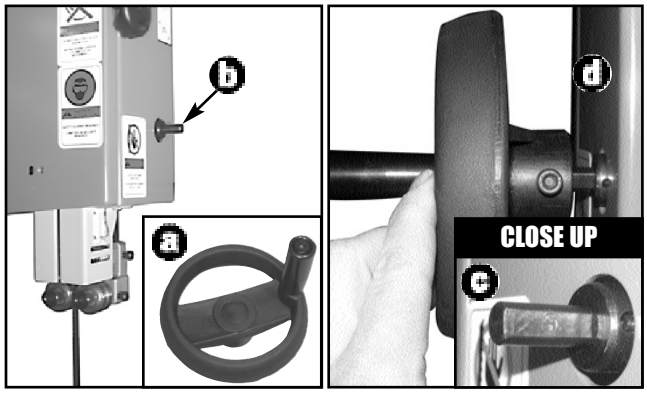
Note: With the table set to 90° and the stop bolt at the correct height, make sure the table tilt angle indicator pointer f is set to read 0°.



4. If the pointer needs to be adjusted, loosen the screw **g** on the pointer of the front trunnion and adjust the pointer to the 0 point on the scale. Then re-tighten the screw to secure the pointer in place.

You will now be able to accurately return the table to the 90° position automatically without further adjustments and scale reading for any angle other than 0° will also be accurate.

INSTALL THE BLADE GUARD HEIGHT ADJUSTMENT HANDWHEEL

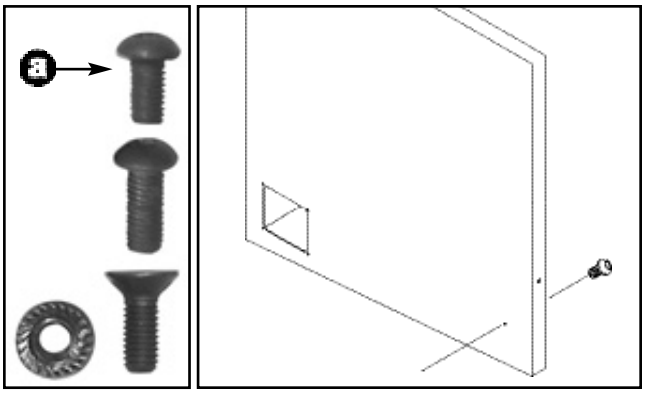


1. Install the handwheel **a** on the shaft **b**, located on the right side of the upper wheel cover, by aligning the flat surface of the shaft **c** with the Allen bolt already mounted on the handwheel **d**.

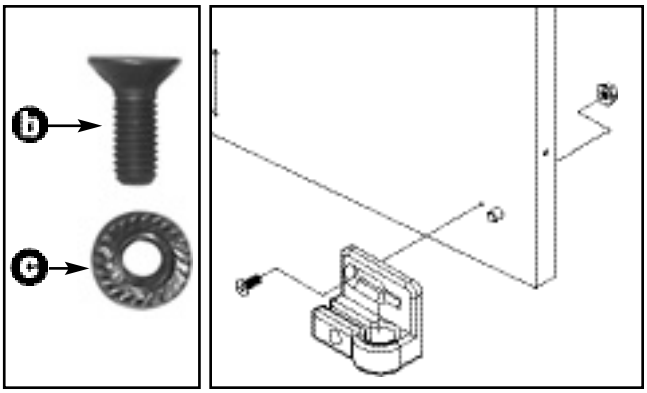
2. Tighten with the supplied 5 mm Allen key to secure the handwheel on the shaft.

INSTALL THE LASER LINE MARKER

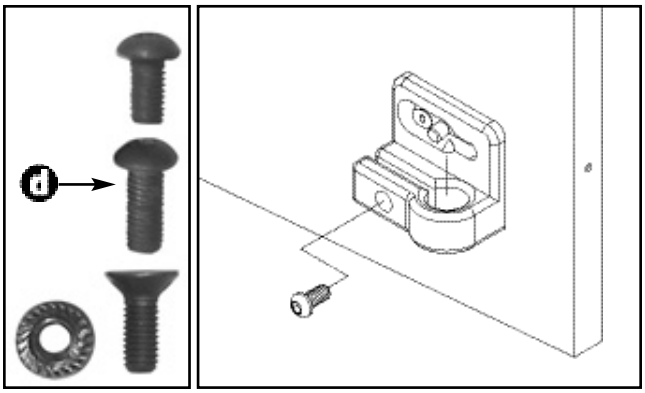
The laser line marker will allow you to easily mark a straight cut line on your workpiece.



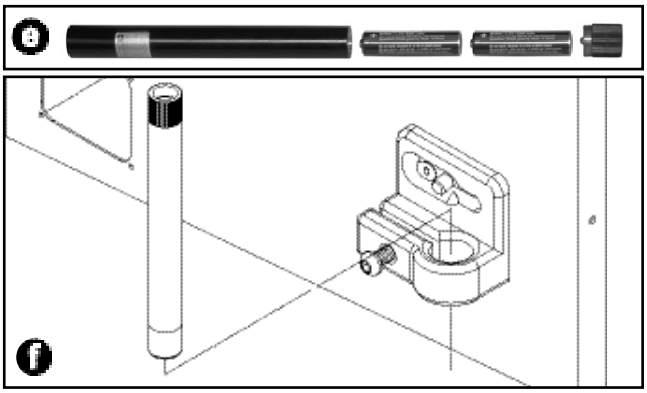
1. Thread the shorter button head bolt ⓐ from the inside of the upper cabinet.



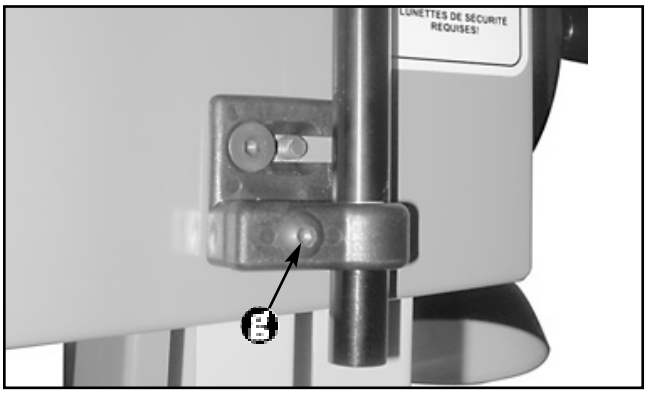
2. Attach the mounting bracket to the front of the saw using the socket screw ⓑ through the door and the flange nut ⓒ on the inside of the door.



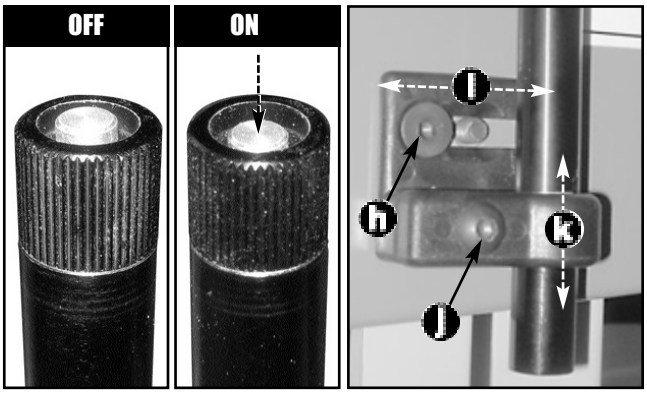
3. Loosely screw the longer button head bolt ⓓ.



4. Unscrew and remove the cap and install two AAA batteries ⓔ (not included), then fit the laser line marker into the the hole in the mounting bracket ⓕ.



5. Using the supplied 3 mm Allen key, tighten the longer button head screw ⓖ, to secure the laser line marker into it's mounting bracket.



Align the laser beam on the blade as follows:

1. Press on the ON/OFF switch button (located on top of the laser line marker) to **turn** the laser **ON.**

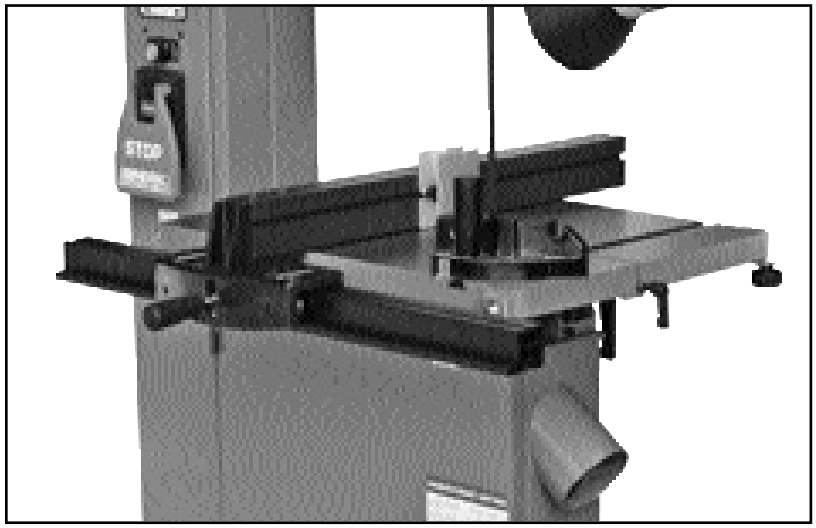
2. Loosen the socket screw ⓗ and move the laser left or right along the elongated hole ⓘ and/or loosen the button head bolt ⓙ and move the laser up or down ⓚ until the beam is aligned with the blade .

3. Press on the ON/OFF switch button once again to to **turn** the laser **OFF.**

INSTALL THE FENCE ASSEMBLY

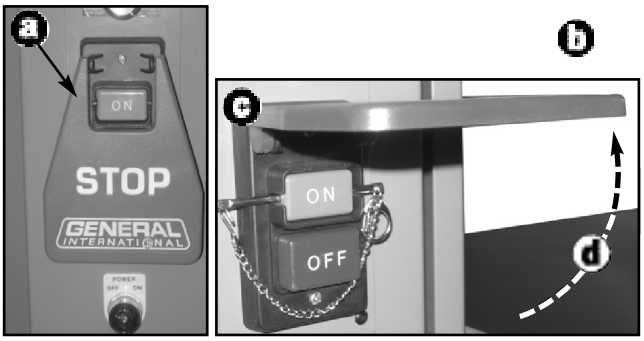
This model 90-320 M1 is equipped with an Excalibur T-fence and guide rail system.

Follow all assembly and adjustment instructions in the 90-075B manual supplied in the box with the Excalibur Universal Bandsaw Rip Fence System.



BASIC ADJUSTMENTS AND CONTROLS

ON/OFF SWITCH & SAFETY PIN



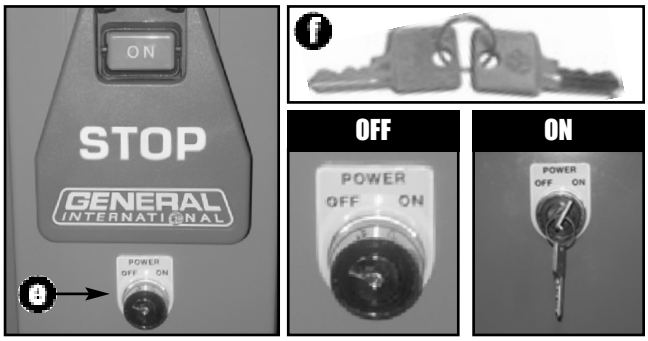
The ON/OFF switch assembly **a** is equipped with a lock-out safety pin **b**. When the pin is installed through the green "on" button **c**, the machine cannot be started.

To start the machine, lift the red stop switch panel **d** and remove the lock-out pin. Lower the stop panel and push the green "ON" button. Wait for the saw blade to reach full speed before cutting.

To stop the machine, push on the RED "STOP" panel and wait for the blade to come to a complete stop.

When you have finished using the machine be sure to re-install the lock-out pin and unplug the machine from the power source.

LOCK-OUT POWER SWITCH



This model 90-320 is also equiped with a lock-out switch **e**.

When this switch is locked (OFF position), the machine cannot be started by pressing on the green "on" button, even if the lock-out safety pin has been removed.

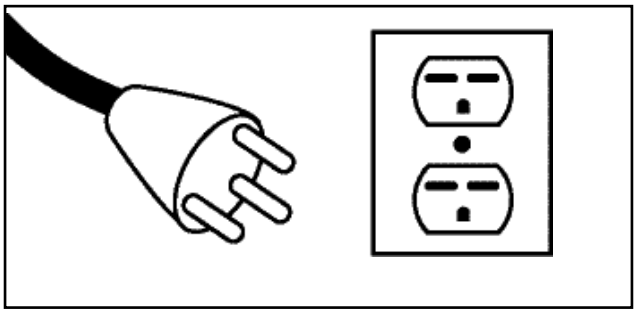
To start the machine, set the power lock-out switch to ON position using the supplied key **f**, then lift the red stop switch panel **d** and remove the lock-out pin. Lower the stop panel and push the green "ON" button.

Set the lock-out switch to the OFF position and store the keys in a safe place, out of the reach of children, whenever the bandsaw is not in use.

CONNECTING TO A POWER SOURCE

To avoid risk of shock or fire do not operate the unit with a damaged power cord or plug. Replace damaged cord or plug immediately.

1. Uncoil the power cord and plug it into an appropriate outlet (refer back to section “Electrical Requirements" and make sure all requirements and grounding instructions are followed).



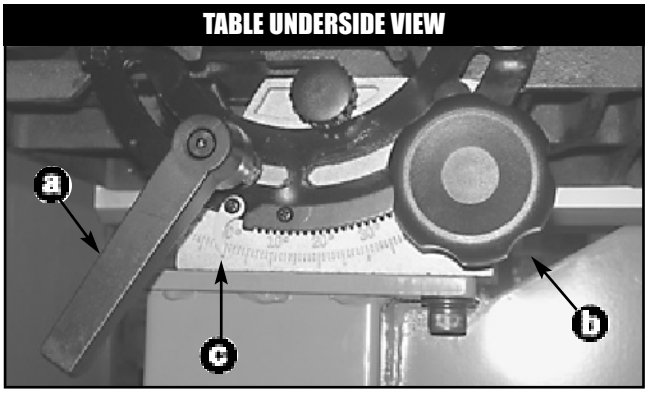
To avoid unexpected or unintentional start-up, make sure that both of the power switches are in the the OFF position before connecting to a power source.

TILTING THE TABLE

The table can be tilted to any angle from 0° to 45° to the right and 0° to 5° to the left to allow for any type of bevel (or angle) cutting. Refer to the table tilt angle indicator under the bandsaw table ⓒ to set the angle of the table to the desired position.

Never adjust the table angle while the bandsaw is running. Turn off power first.

1. Loosen the locking lever ⓐ.
2. Turn the knob ⓑ to tilt the table until it is at the desired angle. (Refer to the angle indicator ⓒ.)
3. Tighten the locking lever to lock the table in position.



ADJUSTING THE BLADE GUARD FOR DEPTH OF CUT

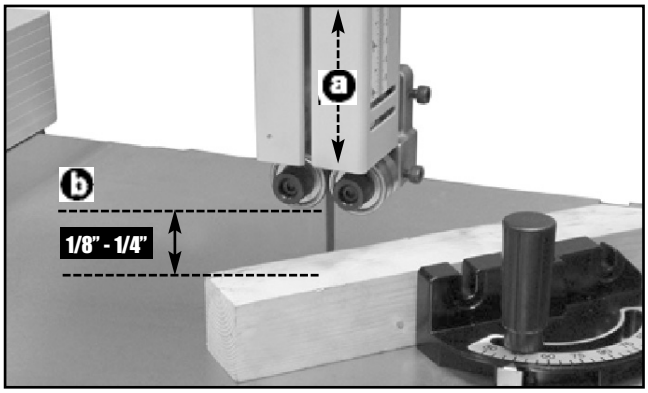
The blade guard can be moved up or down to accommodate the height of the work to be cut ⓐ. To prevent the blade (which is flexible and which would not otherwise be supported) from slipping out of position during cutting, and to reduce risks of injuries, a minimum amount of blade should be exposed.

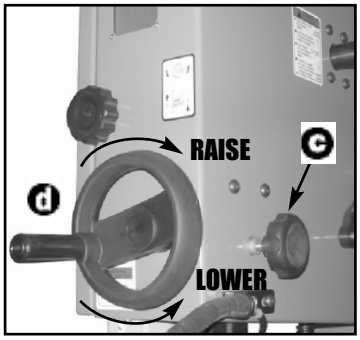
The blade guard should be set 1/8” - 1/4” above the workpiece ⓑ to prevent the blade from flexing out of position or offline during cutting.

Adjust the height of the blade guard to suit the thickness of the workpiece as follows:

1. Make sure the bandsaw is turned off and the power cord is disconnected from the power source.
2. Loosen the lock knob ⓒ.
3. Move the blade guide assembly up or down by turning the handwheel ⓓ. Then re-tighten the lock knob ⓒ.

Note: The depth gauge ⓔ on the front of the blade guard can be used as a reference but it is not intended for high precision measurements.





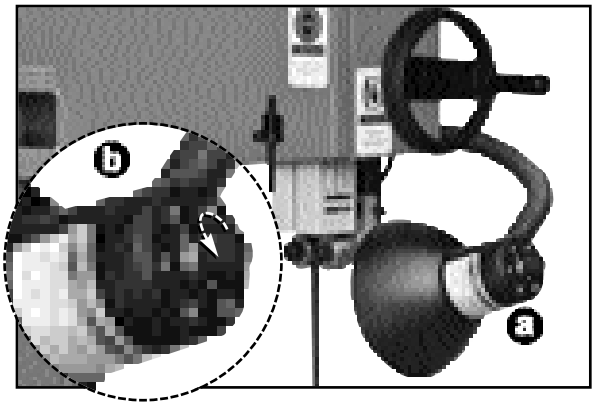
WORKLIGHT

The goose neck style worklight ⓐ on this model 90-320 provides extra lighting for added convenience. It can be repositionned for optimal lighting of the work surface.

Note: Uses a standard 40 Watt (maximum) 120 volt appliance bulb - Not Included.

To reduce the risk of fire, use 40 Watt (maximum) 120 volt appliance bulb. Do not use standard household bulbs.

- Turn the ON/OFF switch ⓑ once to **turn** the worklight **ON**:
- Turn it once again to **turn** the worklight **OFF**:



RECOMMENDED ADJUSTMENTS

REMOVING/INSTALLING THE BLADE

The 90-320 is designed to accommodate both wood and metal cutting blades from 1/8" – 1" in width and is supplied with one 1/2" general purpose wood cutting blade (factory installed) and one 1/2" general purpose metal cutting blade.

BLADE CLEARANCE

Note: When performing blade installation, removal, tensioning or tracking, maximum clearance between the blade and both upper and lower bearing assemblies is required to minimize friction, which would be damaging to the blade.

Proceed as follows:

Move the upper assembly back:

1. Loosen the Allen bolt ⓐ with the supplied 5 mm Allen key.
2. Then pull on the assembly shaft ⓑ going back as far as possible for maximum blade clearance.
3. Tighten the Allen bolt to lock the assembly in place.

Move the lower thrust bearing away from the blade:

1. Loosen the Allen bolt ⓒ with the supplied 5 mm Allen key.
2. Turn the knob ⓓ until the thrust bearing ⓔ is as far as possible for maximum blade clearance.
3. Tighten the Allen bolt to lock the thrust bearing in place.

Move the lower blade guides away from the blade:

1. Loosen the two Allen bolts ⓕ with the supplied 5 mm Allen key.
2. Turn the adjustment knobs outward as needed ⓖ, so as to obtain maximum blade clearance.
3. Tighten the two Allen bolts to lock the blade guides in position.

UPPER ASSEMBLY - RIGHT SIDE VIEW

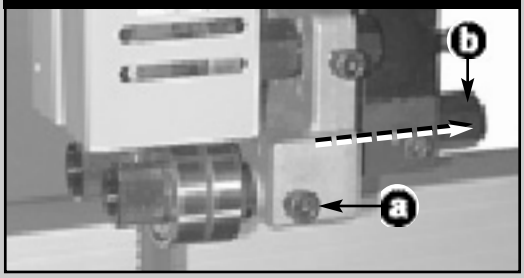


TABLE UNDERSIDE - REAR VIEW

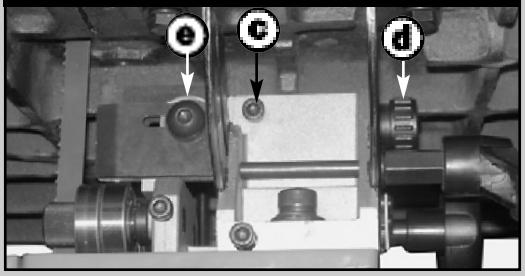
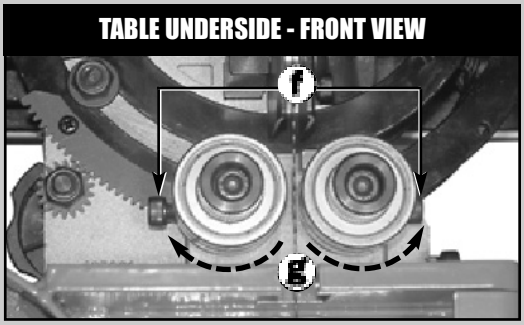


TABLE UNDERSIDE - FRONT VIEW



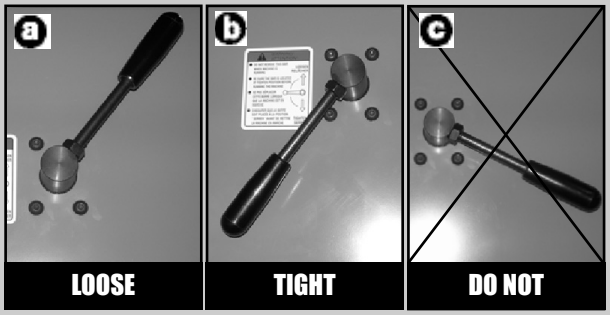
To remove a blade:

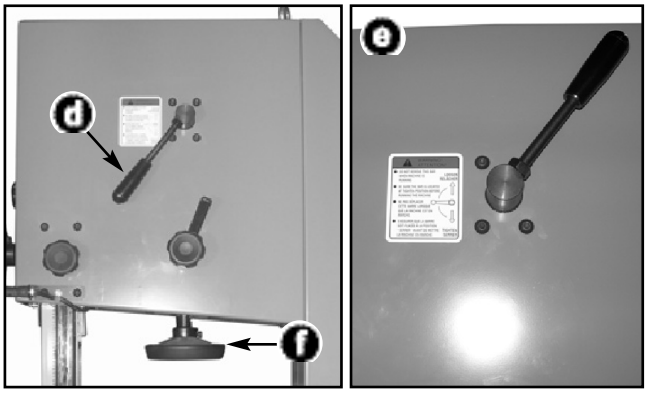
Before replacing or adjusting the blade, make sure that both of the power switches are in the "OFF" position and that the power cord is unplugged.

Blade teeth are sharp. Use care when handling a saw blade.

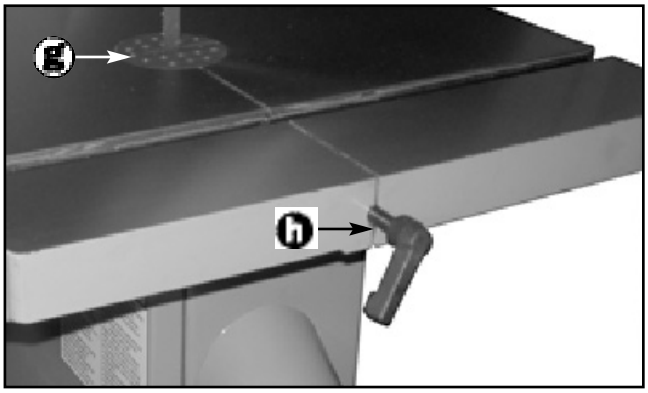
Note: For blade tension quick release, pull the tension lever up as shown in a. For quick blade tensioning, push the tension lever down, as shown in b.

To avoid damaging the tensioning mechanism never force the tension lever beyond "Tight" and "Loose" positions as shown in c.



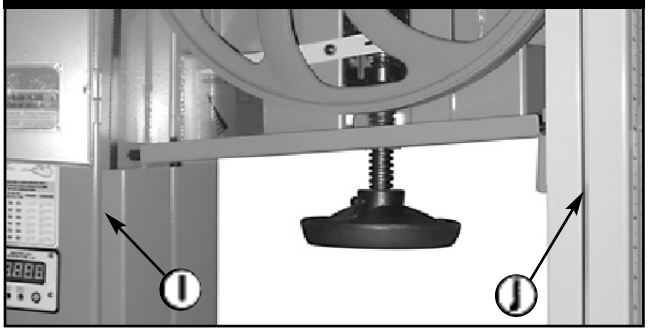


1. Put the tension lever d in the loose position as shown in e to loosen the tension on the blade. It may be necessary to also turn the tension adjust ment hand wheel f counter-clockwise for the blade to be loose enough to remove easily.

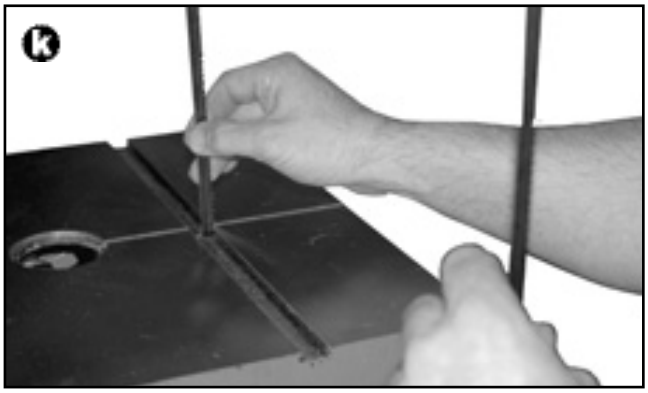


2. Remove the red insert g from the center of the table and the table alignment pin h from the table slot.

Note: You may want to use a thick shop towel to handle the loose blade or wear a pair of heavy duty work gloves.



3. Open the top and bottom wheel cover doors and carefully pull the blade from the left side slot i, blade guard j, and from the wheels.



4. With the blade perpendicular to the wheels, feed the blade through the table slot, k, to free it from the saw.

5. Carefully hang the blade on a hook in a safe, dry place in your workshop if it will be re-used, or dispose of it safely if it is worn or damaged.

Do not attempt to coil up the blade as it was when you first purchased it as it has a tendancy to pop open unexpectedly and could cause injury.

BLADE SELECTION

There are a variety of different types of bandsaw blades on the market to suit various cutting applications. Your results may vary based on usage, experience and personal preference.

Standard size - 131 1/2" (3340 mm) - replacement blades for either wood cutting or metal cutting applications can be found through your local tool dealer or bandsaw blade specialist.

Note: The use of any size outside of the saw's specified length or width range is not recommended and can lead to serious injury and/or damage to the machine. Generally speaking, because the upper wheel height is somewhat adjustable (to allow for blade tensioning), a blade length variation of plus or minus 1/2" from the "ideal blade length" can be accommodated.

Some general guidelines to consider when choosing bandsaw blades:

- Wider blades with fewer teeth per inch are best suited to cutting straight lines, re-sawing and for sweeping curves, but will not turn tight radius curves. They will cut quickly and aggressively but do have a tendency to bind (or get stuck in the cut) if turned too sharply.
- Narrower, thinner blades with more teeth per inch will cut more slowly but can turn much tighter corners for cutting more intricate work.

Common causes of blade breakage:

- Poor guide bearing alignment and adjustment.
- Forcing or twisting a wide blade around a short radius.
- Feeding the workpiece too quickly.
- Dull teeth.
- Too much blade tension.
- Setting blade guard assembly too high above the workpiece.
- Lumpy or improperly finished braze or weld on the blade.
- Continuous running of blade when not cutting.

To install a blade:

1. Turn off the bandsaw and unplug the power cord.

Beware of the blade popping open.

2. If you are installing a new blade, carefully remove the blade from its package. Hold it firmly with one hand as you remove the twist ties. Slowly separate the coils of the blade until it unravels into one hoop.

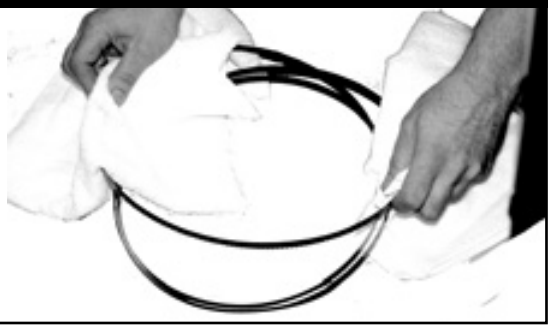
Note: Step 3 may be unnecessary if you've just removed a blade. (If needed, refer back to the previous page.)

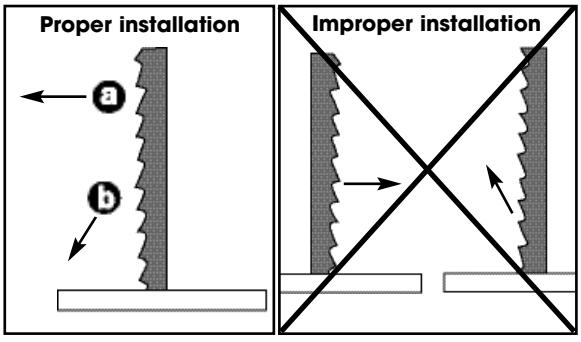
3. Remove the table alignment pin from the table slot and the red insert from the center of the table.

4. With the blade perpendicular to the wheels, guide it through the table slot, then rotate the side of the blade nearest you back toward the left side of the wheels.

5. Feed the blade into the left side slot, blade guard and around the wheels. Make sure the blade teeth point forward ⓐ and down ⓑ.

Note: You may want to use a thick shop towel to handle the loose blade or wear a pair of heavy duty work gloves for the following steps.





With the blade properly installed, proceed to blade tension adjustments and blade tracking adjustments, as per instructions on the next few pages.

ADJUSTING BLADE TENSION

Determining ideal blade tension is somewhat subjective. It is learned through practice and experience and is somewhat dependant on personal preference and individual work habits.

A properly tensioned blade is critical to obtaining maximum performance from any bandsaw. A properly tensioned blade will last longer and be much less likely to break prematurely. If the blade tension is too loose you will notice that the blade will have a tendency to drift or slip off-line when cutting and you will have more difficulty controlling your cuts. A blade that is tensioned too tightly will break prematurely and will be difficult to work with when making tighter radius cuts.

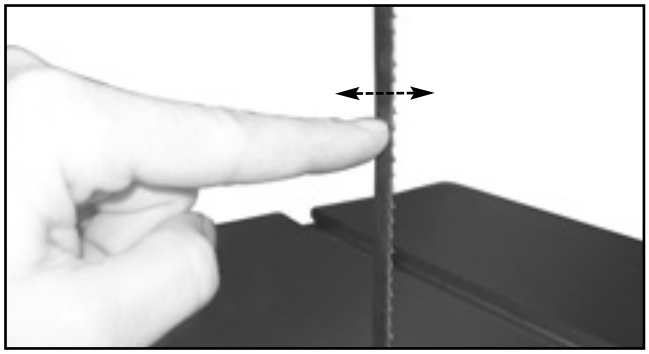
The following information can be used as a guideline or starting point to assist you in determining ideal blade tension for your needs:

- When working with wider blades, re-sawing taller stock, making straight cuts or wide sweeping curves tighter blade tensions will provide better results.
- When working with narrower blades, sawing shorter stock and making tighter curved cuts are best performed using less tension

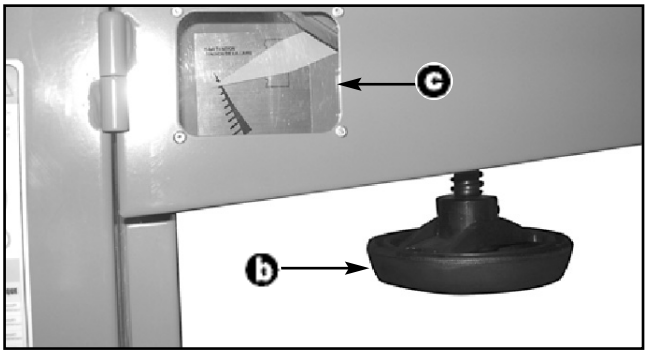
To adjust blade tension proceed as follows:

Before making blade tension adjustments, make sure that both of the power switches are in the "OFF" position and that the power cord is unplugged.

1. Put the tension lever ⓐ in the tight position as shown for quick blade tensionning.

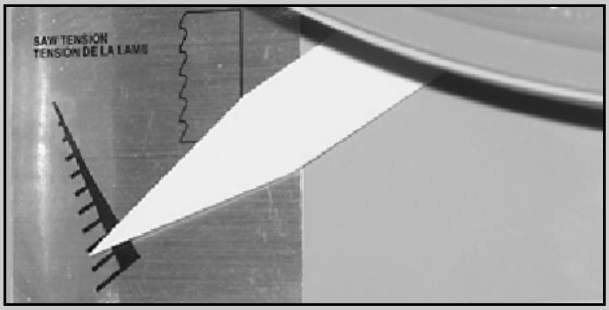


2. With the saw turned off, press against the side of the blade to test the tautness of the blade. For ideal results with most blade widths and cutting applications the blade should flex in no more than 1/4" to 3/8".



3. If needed, adjust the blade tensioning by turning the blade tension hand wheel ⓑ :

- Clockwise to tighten
- Counter-clockwise to loosen the blade tension.

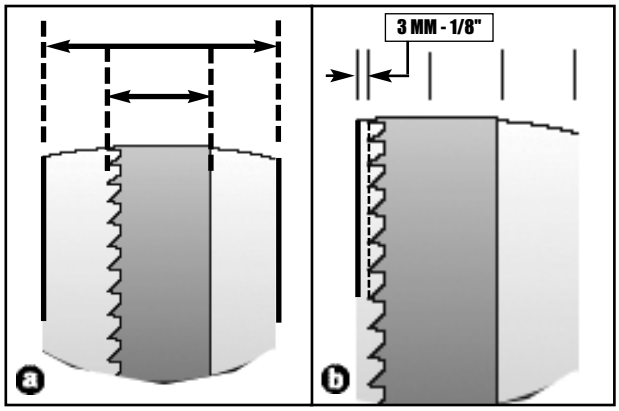


Note: the blade tension indicator scale ⓒ can be used as a reference – the longer the line on the scale the tighter the tension on the blade. Take note of ideal setting with various blade widths for reference the next time that blade is used or when a similar type of cut is to be performed.

4. Make a test cut on a sample piece of wood and if needed re-adjust the blade tension.

Note: To prolong the life of the blade whenever the band saw is not in use for prolonged periods (more than 24 hours), release the blade tension lever to remove tension from the blade, Over time, maintaining tension on a blade that is not in use will cause the blade to deform, by taking the shape of the wheels at both extremities. This can weaken the blade and cause premature breakage.

BLADE TRACKING ADJUSTMENTS



Ideally, the blade should stay relatively centered ⓐ on both the upper and lower wheels.

Due to natural variations in castings, blade thickness or density and tire wear, absolute perfect centering alignment is rarely attainable. A slight misalignment of the blade on the wheels is inevitable and as long as it is kept to a minimum (following the steps listed below) will not hinder the performance of the saw.

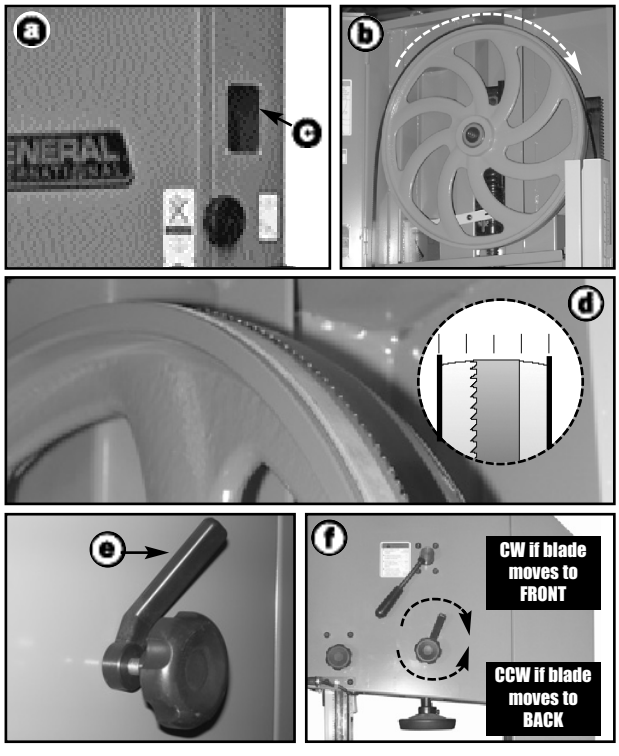
This misalignment is controlled and kept to a minimum primarily by adjusting the tilt angle of the upper wheel.

When adjusting blade tracking to center the blade on the wheels and assuming that perfect centering is not attainable, it is preferable to have the blade slightly off-center towards the front of the wheels rather than towards the rear because the teeth on most band saw blades have alternating hook (one inner, one outer) – therefore if the blade is centered too far back on the wheel (or if the blade tension is too tight), inner hooked teeth will dig into the wheel tire and cause premature wear of the tire.

Nonetheless, to avoid having the blade come off of the wheels on it's own during operation, the front edge of the blades teeth should never be any closer than 3 mm (1/8") from the front edge of the wheel ⓑ.

BLADE CLEARANCE

Note: As previously stated, when performing blade installation, removal, tensionning or tracking, maximum clearance between the blade and both upper and lower bearing assemblies is required to minimize friction, which would be damaging to the blade. Refer back to page 17 and follow the instructions for "BLADE CLEARANCE" before performing blade tracking adjustments.



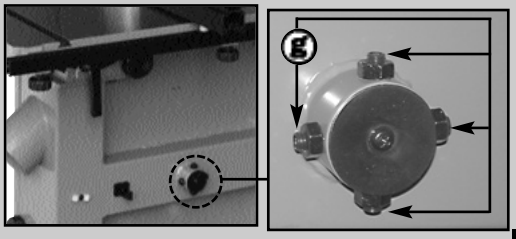
1. Open the upper wheel cover door ⓐ then rotate the wheel slowly forward by hand ⓑ and check (through the window of the upper wheel ⓒ) the position of the blade on the wheel. The blade should remain as centered as possible on the wheel as it turns ⓓ.

2. If the blade tracking must be adjusted, loosen the locking lever ⓔ on the tracking adjustment knob ⓕ, then turn the knob:
   - Clockwise if the blade moves toward the front of the wheel. This tilts the top of the wheel to the back and moves the blade toward the center.
   - Counter-clockwise if the blade moves toward the back edge. This tilts the top of the wheel to the front and moves the blade toward the center.

Note: Turn the tracking knob in 1/2 turn increments, re-check and adjust again as needed.

3. With the tracking set, tighten the locking lever to secure the tracking adjustment knob in place.

Note: The upper and lower wheels are factory set to allow for easy and optimal blade tracking adjustments using the primary blade tracking adjustment knob, which adjusts the angle of tilt of the upper wheel. In extremely rare cases, if acceptable blade tracking cannot be attained through the primary adjustment it may eventually become necessary to make minor adjustments to the angle of tilt of the lower wheel. The four bolts ⓖ may be adjusted in or out to tilt the lower wheel up/down or left/right as needed.



ADJUSTING THE UPPER / LOWER BLADE GUIDES AND THRUST BEARINGS

The blade guides keep the blade from moving from side to side during cutting and must be snug but not touching the blade in order to ensure accurate cuts. The space between each guide and the blade must not exceed 0.02" (the thickness of a sheet of paper). If less space is left, the blade will get stuck or jammed between both guides. Too much friction will cause blade to overheat and break. Also, the guides must remain at least 1/32" behind the blade teeth to prevent damage to the blade.

The thrust bearings keeps the blade from moving back and out of position when the work is being fed into the blade and must be very close to the back of the blade to prevent damage to the blade during cutting.

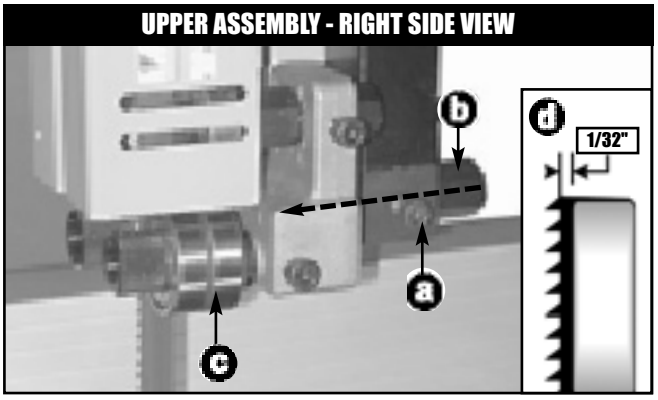
Note: Before adjusting the upper and lower blade guides and thrust bearings, make sure the blade is tensioned and tracking properly. Adjust the upper and lower blade guides and thrust bearings after each blade tension and tracking adjustment.

To avoid injury, make sure that both of the power switches are in the "OFF" position and that the power cord is unplugged before performing any adjustments on the bandsaw.

Adjust the positioning of the upper blade guides and thrust bearing assembly as follows:

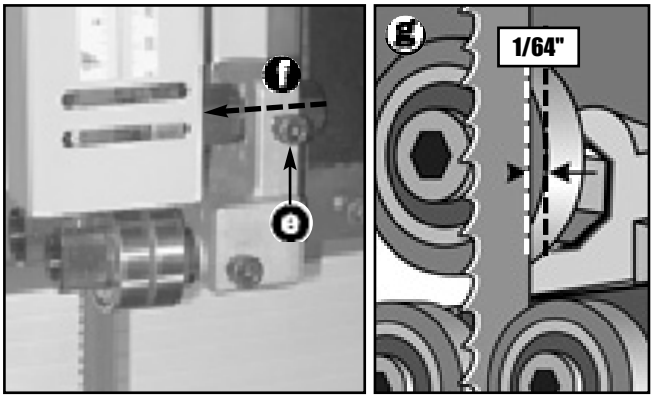
The upper blade guides and thrust bearing are assembled as one unit which can be moved back or forward. To prevent damage to the blade, the blade guides must remain behind the blade teeth during operation.

1. Loosen the Allen bolt ⓐ with the supplied 5 mm Allen key.
2. Move the upper assembly forward along the shaft ⓑ, until the blade guides ⓒ are at least 1/32" behind the blade teeth ⓓ, (do not protrude past the hollowed part of the teeth of the blade.
3. Tighten the Allen bolt ⓐ to lock the assembly in place.



Adjust the positioning of the upper thrust bearing as follows:

1. Loosen the Allen bolt ⓔ with the supplied 5 mm Allen key.
2. Move the shaft ⓕ in or out , until the thrust bearing barely touches the blade (is 1/64" behind the back of the blade ⓖ) .
3. Tighten the Allen bolt ⓔ to lock the thrust bearing in position.

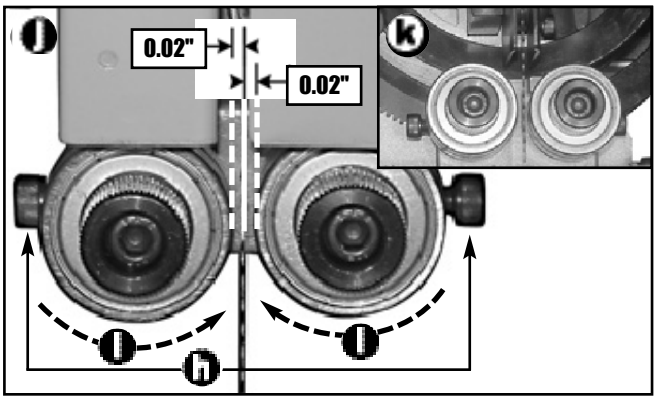


Adjust the positioning of the upper and lower blade guides as follows:

1. Loosen the two Allen bolts ⓗ with the supplied 5 mm Allen key.
2. Turn the adjustment knobs inward as needed ⓘ, to obtain a space of 0.02" (the thickness of a sheet of paper) between both guides and the blade ⓙ.

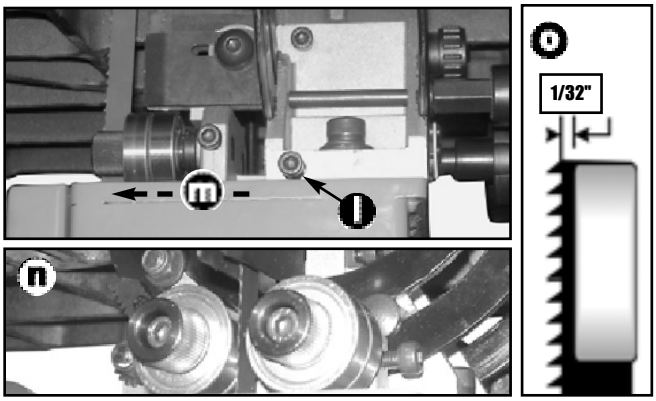
Tip: Place a feeler gauge or sheet of paper between each guide and the blade to make sure there is a 0.02" space.

3. Tighten the two Allen bolts to lock the blade guides in position.
4. Repeat steps 1 to 3 with the lower blade guides ⓚ.



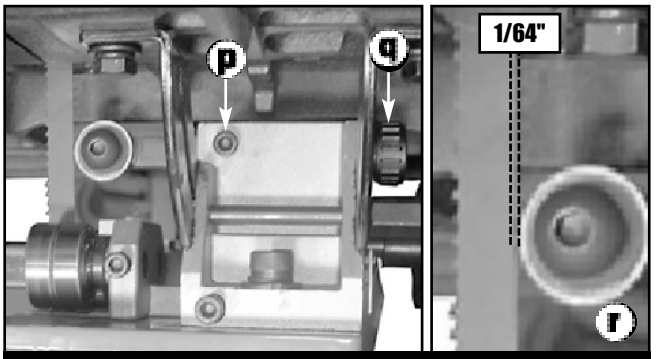
Adjust the positioning of the lower blade guide assembly as follows:

1. Loosen the Allen bolt ⓛ with the supplied 5 mm Allen key.
2. Move the lower blade guide assembly forward along the shaft ⓜ, until the blade guides ⓝ are at least 1/32" behind the blade teeth ⓞ, (do not protrude past the hollowed part of the teeth of the blade.
3. Tighten the Allen bolt ⓛ to lock the assembly in place.



Adjust the positioning of the lower thrust bearing as follows:

1. Loosen the Allen bolt ⓟ with the supplied 5 mm Allen key.
2. Turn the knob ⓠ until the thrust bearing barely touches the blade (is 1/64" behind the back of the blade) ⓡ .
3. Tighten the Allen bolt ⓟ to lock the thrust bearing in position.



BLADE SPEED CONTROL

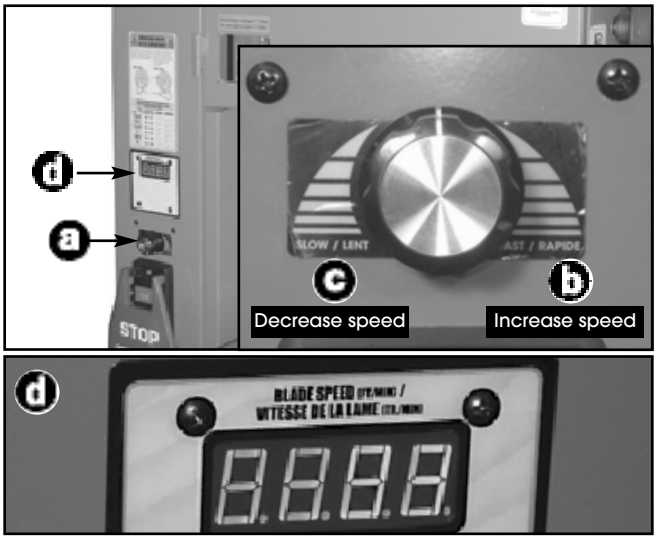
The blade speed ranges from 540 to 3600 Feet Per Minute (FPM) for Wood cutting and from 100 to 650 FPM for Metal cutting applications, depending on the positionning of the drive belt on the pulleys.

Note: Refer to the reference chart below for speed selection for metal cutting, based on workpiece material .

The blade speed control knob is located on the control box, just above the on/off switch, ⓐ.

- Turn the knob clockwise ⓑ to increase the blade speed.
- Turn the knob counter-clockwise ⓒ to decrease the blade speed.

The blade speed will be indicated on the digital speed display ⓓ.



METAL CUTTING BLADE AND SPEED REFERENCE CHART

WORKPIECE MATERIAL	BLADE SPEED IN FEET PER MINUTE (FPM)	REMARK
STEEL (TOUGH)	100 - 125	10 - 14 TPI Blade / Low feed rate
MILD STEEL	150 - 250	5 - 10 TPI Blade / Moderate feed rate
CAST-IRON (MEDIUM)	150 - 250	5 - 10 TPI Blade / Moderate feed rate
BRONZE	150 - 250	5 - 10 TPI Blade / Moderate feed rate
BRASS	300 - 400	5 - 10 TPI Blade / Moderate feed rate
ALUMINUM	250 - 350	5 - 10 TPI Blade / Moderate feed rate
PLASTIC	700 - 800	5 - 10 TPI Blade / Moderate feed rate

*The information in this chart is supplied as a general guideline only. Your results may vary depending on blade material, as well as its quality and sharpness. For best results always follow any speed recommendations supplied with the blades being used.

CHANGING BLADE SPEED RANGE – SWITCHING FROM WOOD TO METAL CUTTING

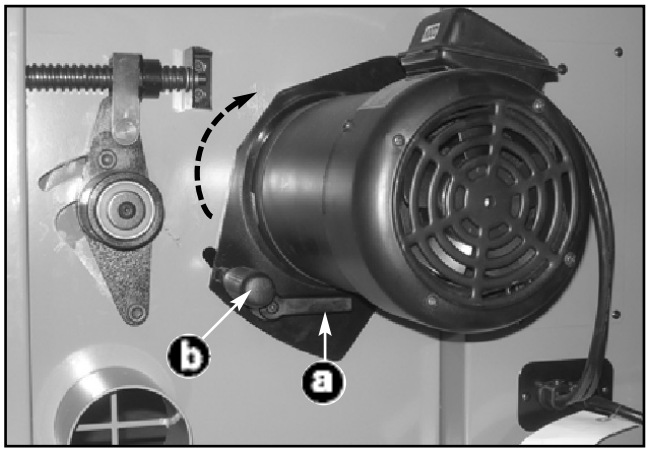
To avoid injury, make sure that the switch is in the "OFF" position and that the power cord is unplugged before performing any adjustments on the bandsaw.

By simply changing the positioning of the drive belt from one set of pulleys to the other, the user can select a speed range, Metal (100-650 FPM) or Wood (540-3600 FPM), depending on the cutting application.

The 90-320 is factory set for Wood cutting applications. The drive belt is positioned to allow a 540-3600 FPM speed range and the blade installed is a wood cutting blade.

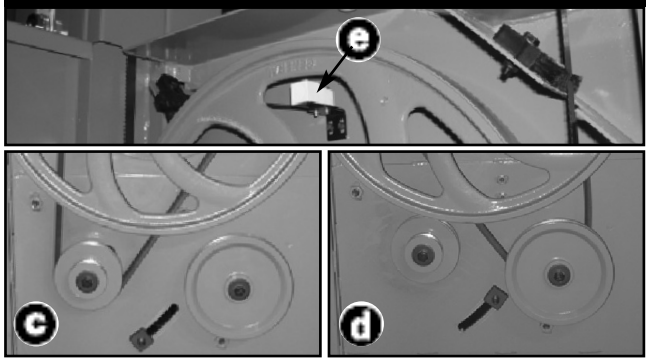
To switch from wood to metal cutting:

1. Remove the wood cutting blade and install a metal cutting blade, adjust the blade tension and tracking, then adjust the upper and lower blade guides and thrust bearings.

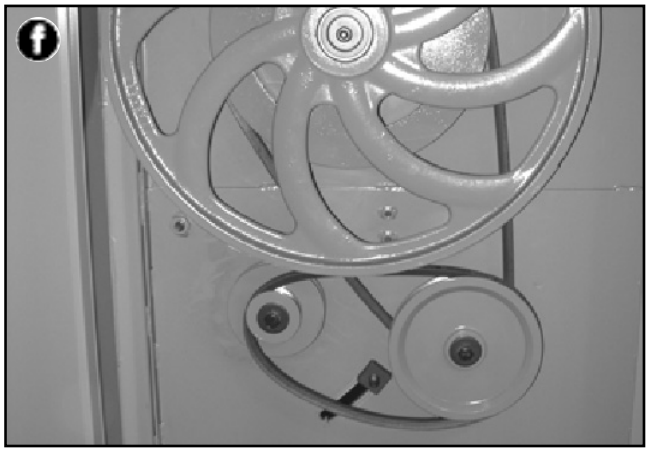


2. Loosen the lock lever ⓐ that locks the motor pivot, then, using the handle ⓑ, lift the motor by hand and tighten lever ⓐ to lock the motor in position. This will loosen the drive belt.

Note: When transfering belt A44, take care in doing so not to touch the sensor ⓔ as this would affect the blade speed display accuracy.

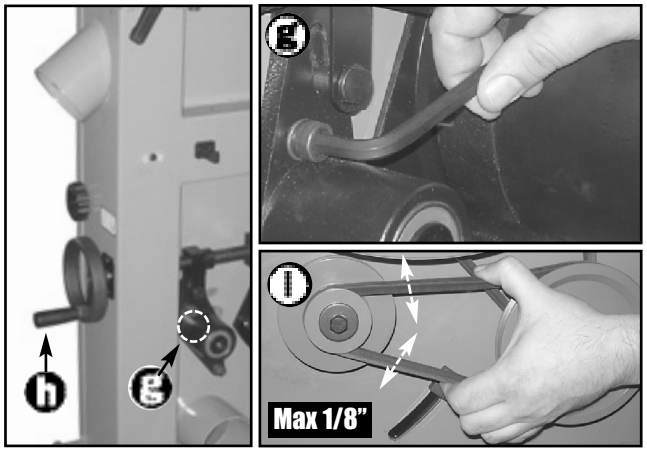


3. Transfer belt A44 (factory installed) from the drive pulley ⓒ to the inside groove on the idler pulley ⓓ, then set the motor back to it's initial position to tighten the belt around the pulleys.



4. Install the supplied shorter belt (A27) on the outside groove of the drive pulley and outside groove of the idler pulley, ⓕ .

Note: When transfering belt A44 or installing belt A27, take care in doing so not to touch the sensor ⓔ (step 3) as this would affect the blade speed display accuracy.



5. Loosen the cap screw ⓖ using the supplied 8 mm Allen key to unlock the belt tensioning mecanism.
6. Use the tension adjustment hand wheel ⓗ to tension the belt.
7. Squeeze the belt with your hand ⓘ. The belt should move no more than 1/8". If needed, re-adjust the belt tension.
8. Re-tighten the cap screw ⓖ to lock the belt tensioning mecanism.

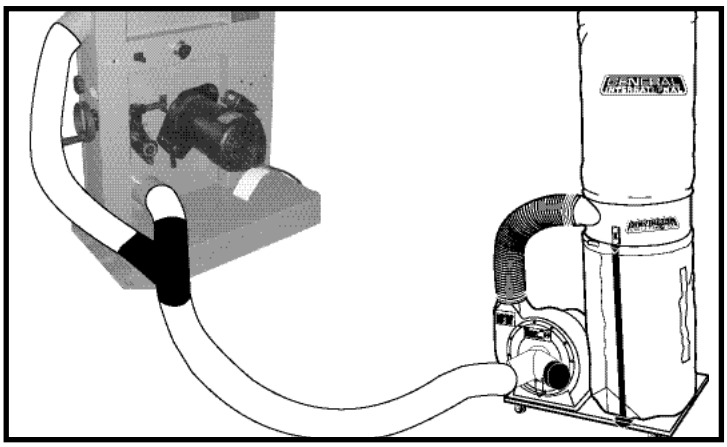
OPERATING INSTRUCTIONS

CONNECTING TO A DUST COLLECTOR

This model 90-320 is equiped with two built-in 4" diameter dust chutes to accommodate connection to a dust collector (not included).

Bee sure to use appropriate sized hose and fittings (not included) and check that all connections are sealed tightly to help minimize airborne dust.

If you do not already own a dust collection system consider contacting your General® International distributor for information on our complete line of dust collection systems and accessories or visit our Web Site at: www.general.ca.



CHECKLIST BEFORE STARTING

NOTE: Now that you have completed the five adjustment steps which are an essential part of safe, accurate bandsaw operation, it would be a good idea to make yourself a checklist as follows to ensure that each adjustment to the bandsaw is made in the proper order starting with the general safety precaution:

1. ***Turn off the bandsaw and unplug the power cord.***
2. ***Adjust blade tension.***
3. ***Adjust blade tracking.***
4. ***Adjust upper blade guides and support bearing.***
5. ***Adjust lower blade guides and support bearing.***
6. ***Select the right speed range depending on the cutting application.***

These additional safety measures should be be included in your checklist:

7. ***Make sure all the blade guards are in place.***
8. ***Make sure the bandsaw table and work area in general are clean and free of sawdust and debris.***

These steps should always be followed when any adjustment is performed, the blade is changed, or periodically as vibration and normal wear and tear on the machine could throw these parts out of alignment.

OPERATIONS STEP-BY-STEP

To reduce the risk of damage to the bandsaw or the workpiece, as well as a potential for personal injury, after initial set-up as well as before each use, make sure that everything is securely installed and that all fasteners and moving parts on this bandsaw are locked in place before starting the machine.

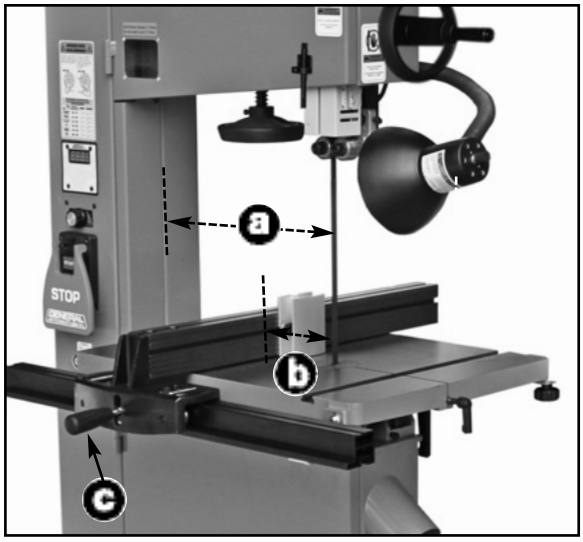
1. Trace the cutting line on your workpiece with a pencil (for cutting curves) or adjust the laser beam to mark the cutting line (for cutting straight lines). If needed, refer back to section “laser line marker” on page 13.
2. Set the height of the blade guard according to the thickness of your workpiece (see section: “Adjusting the blade guard for depth of cut” on page 16.)
3. If a dust collector is connected to your bandsaw, turn it on.
4. Push on the green “ON” button to start the bandsaw.
5. Align the cutting line on your workpiece with the blade and feed the workpiece into the blade.

Tip: The use of a roller stand provides an extra support for more convenience when working with longer workpieces.

TO STOP THE MACHINE

1. Push the red “STOP” panel.
2. Turn your dust collector off.

USING THE RIP FENCE



1. Set the fence down on the rail either to the left or right of the blade.

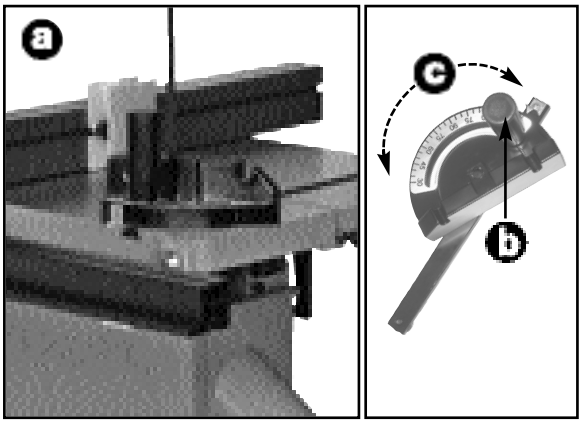
Note: For short workpieces that fit between the frame of the saw and the blade ⓐ, position the fence at the left side of the blade. For cutting longer or wider workpieces, position the fence, on the right side of the saw blade.

2. Adjust the positioning of the fence on the rail so that the distance from the inside face of the rip fence to the blade ⓑ matches the required width of cut.

3. Tighten the locking handle ⓒ to lock the the fence in place.

Make sure to lock the fence in place before starting to cut against the rip fence.

USING THE MITER GAUGE



Using the miter gauge supplied with your bandsaw allows for easier and safer sawing by providing workpiece support when cutting straight (90°) or angled ends (0° to 30°).

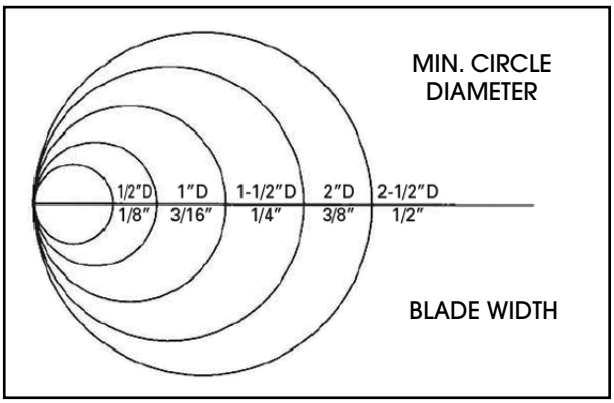
The miter gauge rides in the table slot to the right of the blade ⓐ and can be set to any angle up to 30° to the left or right. It also acts as a feeder for advancing smaller workpieces through the blade with reduced risk of injury to the hands.

To use a setting other than 90°, loosen the locking handle ⓑ by turning it counterclockwise. Rotate the miter head to the required angle ⓒ, shown on the angle indicator. Then turn the locking handle clockwise to tighten it.

CUTTING CURVES

- When cutting curves, carefully turn the workpiece so the blade follows without twisting. If the curve is so sharp that you repeatedly back up and cut new kerf, use a narrower blade, or a blade with more set (teeth further apart). When a blade has more set, the workpiece turns easier but the cut is rougher.
- When changing a cut, do not withdraw the workpiece from the blade. The blade may get drawn off the wheels.
- To change a cut, turn the workpiece and cut your way out through the waste material area.
- When cutting long curves, make relief cuts as you go along.

CUTTING CIRCLES



1. Adjust the blade guard assembly to 1/8" above the workpiece.

2. Use both hands while feeding the work into the blade. Hold the workpiece firmly against the table. Use gentle pressure. Do not force the work. Allow the blade to cut.

3. The smallest diameter circle that can be cut is determined by the width of the blade. For example, a 1/4" wide blade will cut a minimum diameter of approximately 1-1/2" .

PERIODIC MAINTENANCE

Never operate the bandsaw with any damaged part. Replace a damaged part at the first visible signs of damage.

1. Inspect/test the ON/OFF switch before each use. Do not operate the bandsaw with a damaged switch; replace a damaged switch immediately.

2. Periodically inspect the power cord/plug and the blade for damage.

To avoid eye injury from blowing debris, wear safety goggles when blowing out sawdust.

3. Keep the machine clean and free of sawdust. Frequently blow out or vacuum up the sawdust and wipe down the machine occasionally with a damp rag.

Note: The wheels must always be kept clean. Dirt on the wheels will cause blade slippage.

4. Do not allow dirt, pitch or gum to build up on the table, blade, guide/thrust bearings. Clean as needed with gum and pitch remover.

Note: Do not immerse the bearings in the gum and pitch remover.

5. To prevent rust and from forming on the unpainted cast iron of the table, and so that the wood slides easily while cutting, apply a light coating of paste wax or use regular applications of any after-market surface protectant or rust inhibitor such as General International "Top Saver" item #GC-010. (See Section "Recommended optional accessories for your bandsaw".)

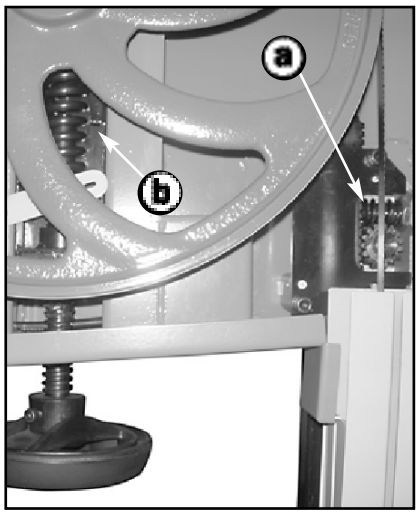
REQUIRED MAINTENANCE

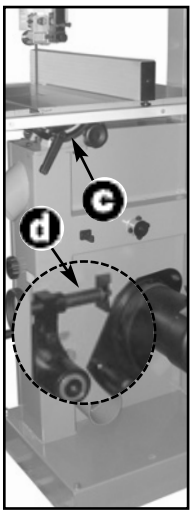
LUBRICATION

Disconnect machine from power source, before performing any lubrication or maintenance.

Keep the rack and pinion ⓐ as well as the blade tension adjustment screw ⓑ, table trunnion ⓒ and belt tension adjustment screw ⓓ greased and free of dust or debris. Clean and remove dust, debris, and old grease after every 10-15 hours of use. After cleaning, reapply grease as needed. (Use any all purpose grease.)

The motor and all bearings are sealed and permanently lubricated – no further lubrication is required. No other part of this bandsaw needs lubrication.





REPLACING THE BANDSAW BLADE

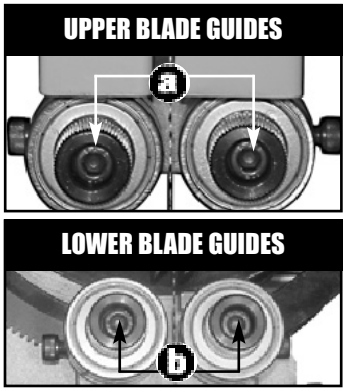
The blade should be replaced when worn out. Refer to the following symptoms to determine whether or not it is time to replace the blade:

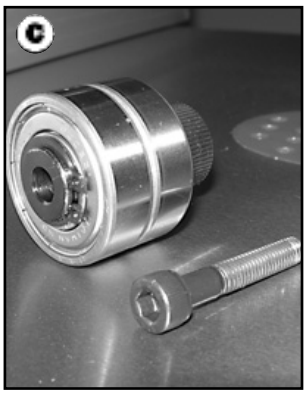
- It is not cutting as fast.
- It is not able to follow a cutting line as it used to.

REPLACING THE UPPER AND LOWER BLADE GUIDES AND THRUST BEARINGS

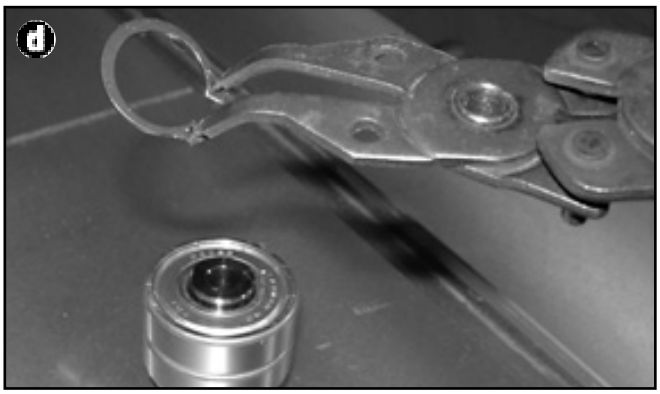
Blade guides and thrust bearings should be verified each time the blade is replaced. Check if they turn well. If not, the blade will get stuck or jammed between them and will wear prematurely.

To replace the upper and/or lower blade guides:



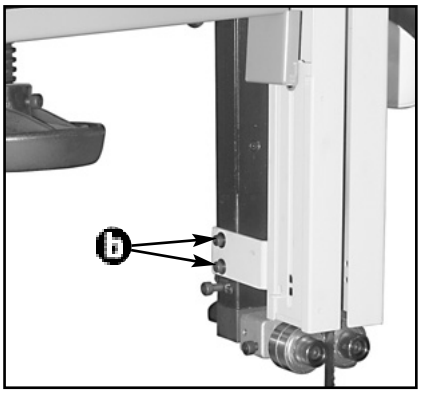


1. Loosen and remove the two Allen bolts **a** and/or **b**, using the 5 mm Allen key provided. Removing the two bolts will free the blade guides **c**.

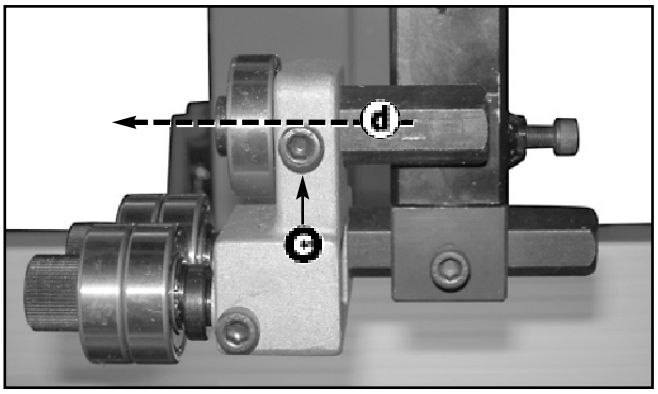


2. Use C-ring pliers to remove the "C ring" **d** and replace the two blade guides with new ones, then re-install the C-ring and tighten with the two Allen bolts.

To replace the upper thrust bearing:



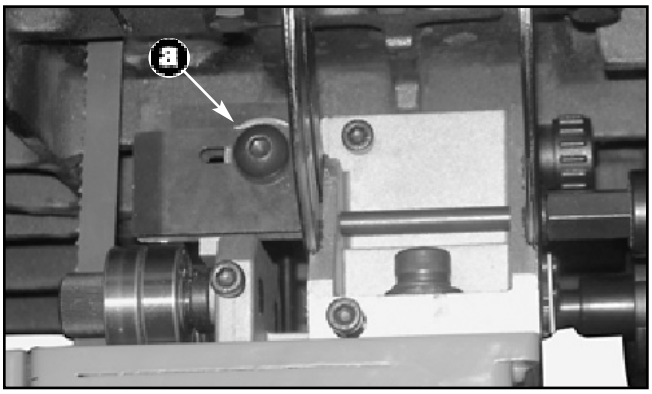
1. Set the tension lever **a** up to loosen the blade then unscrew the two Allen bolts **b**, using the supplied 3 mm Allen key, and remove the blade guard.



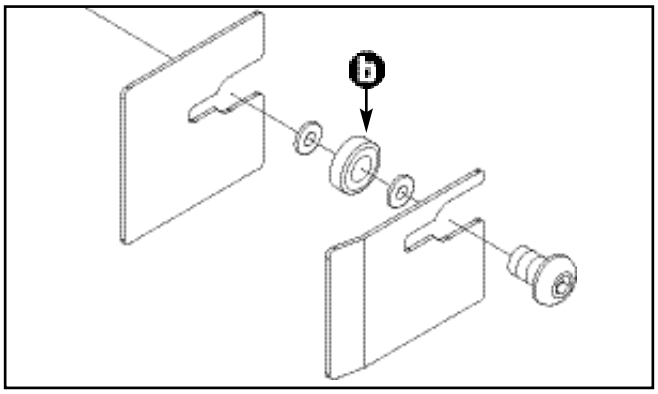
2. Loosen the allen bolt **c** using the supplied 5 mm Allen key then remove the thrust bearing and mounting shaft.

3. Use C-ring pliers to remove the "C ring" and slide the bearing off the shaft **e**.
4. Install a new bearing on the mounting shaft.
5. Re-install the C-ring.
6. Put the bearing and mounting shaft back in place, and tighten the Allen bolt.
7. Re-install the blade-guard.

To replace the lower thrust bearing:



1. Loosen the socket head bolt ⓐ using a 6 mm Allen key, and remove the lower thrust bearing assembly.

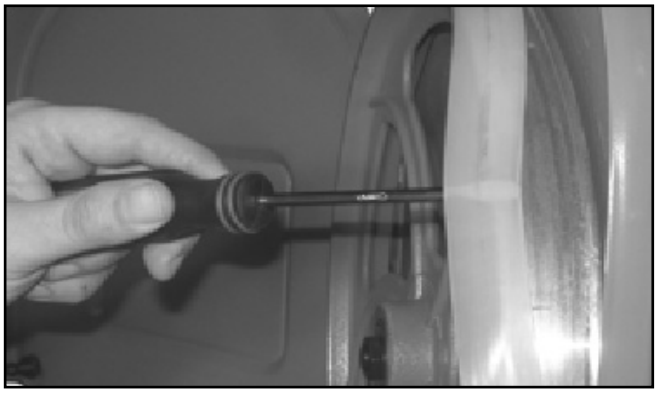


2. Replace the bearing ⓑ with a new one then put the lower thrust bearing assembly back in place.

REPLACING THE WHEEL TIRE

Wheel tires must be replaced if they get worn out or damaged. (If it is worn out, the blade will not track straight on the wheels.)

Use a flat screwdriver to remove the tire from the groove on the wheel, then install a new tire.



ADJUSTING/REPLACING THE WHEEL/BLADE BRUSHES

The lower wheel is equipped with a cleaning brush ⓐ that prevents pitch and sawdust build up on the lower tire.

There is two other cleaning brushes – one in the lower wheel cover ⓑ and one in the upper wheel cover ⓒ – both mounted against the blade, that prevents pitch and sawdust build up on the blade.

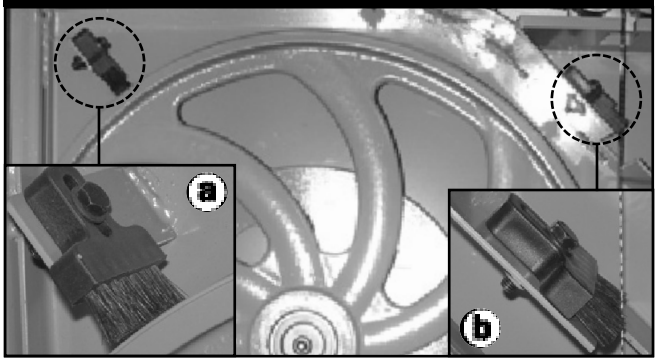
Any pitch and sawdust that builds up on the upper wheel tire should be removed with a stiff brush or scraped off with a piece of wood.

Note: To avoid damaging the tire do not use a sharp knife or any kind of solvent to remove pitch build up.

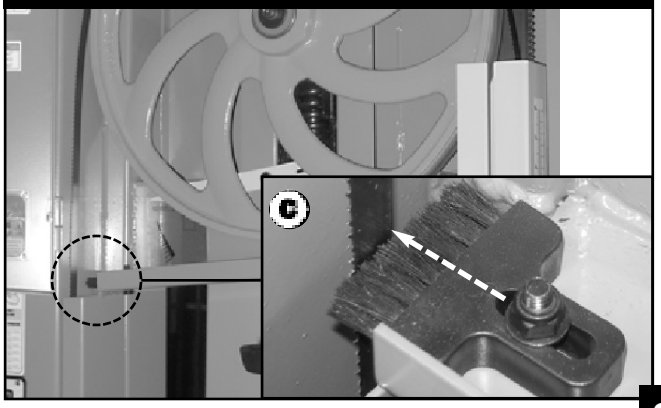
Verify that the brushes keep the lower wheel/blade surface clean at all times. With use and normal wear over time, the brushes hairs will soften and will not clean the surface of the wheel/blade as well. You then must lower the brushes slightly as follows:

1. Loosen the hex bolt (or hex nut).
2. Slightly slide the brush along the mounting hole as shown in ⓒ, so that a fresh, stiffer part of the hairs touches the wheel tire or blade.
3. Tighten the hex bolt (or hex nut) to lock the brush in position.

LOWER WHEEL



UPPER WHEEL



RECOMMENDED OPTIONAL ACCESSORIES

Here are some of the optional accessories available from your local General International dealer.

For more information about our products, please visit our website at www.general.ca

Dust Collectors and accessories

We offer a wide selection of dust collectors and accessories to suit virtually all your shop needs. Dust collectors contribute to a cleaner healthier workshop environment.

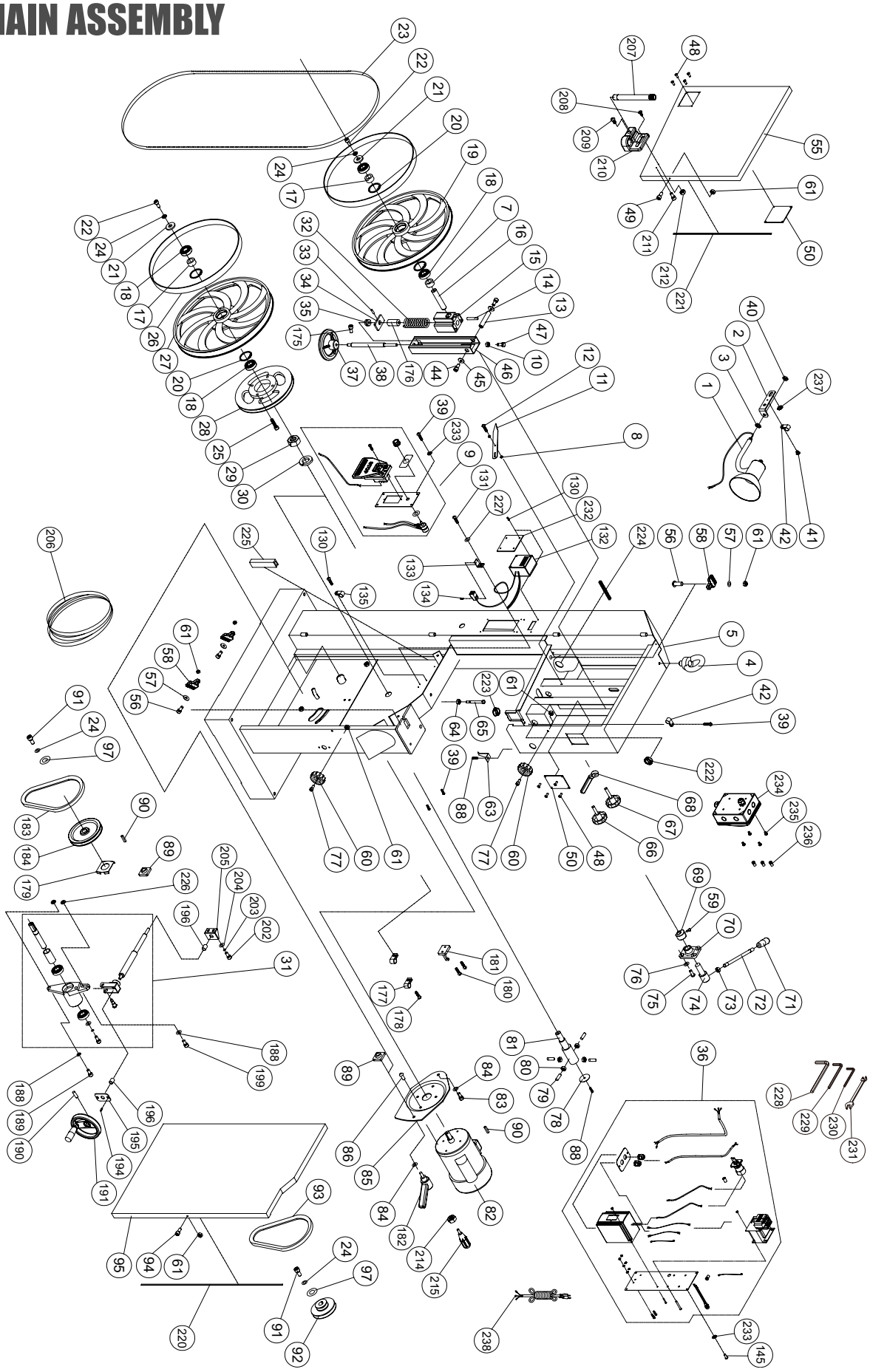
Roller Stand
item #50-150
item #50-160
item #50-170

We offer a selection of roller stands to suit all your shop needs.

NOTES

Notes

MAIN ASSEMBLY



PARTS LIST
90-320

MAIN ASSEMBLY

PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-01	135242	WORKLIGHT		1
90320-02	135246	WORKLIGHT MOUNTING BRACKET		1
90320-03	WE100000	STAR WASHER		1
90320-04	995101	EYE BOLT	M10	1
90320-05	135222	MACHINE BODY		1
90320-07	612112	BUSHING		1
90320-08	WF061310	FLAT WASHER	M6xØ13	2
90320-09	AB135248A	SWITCH ASS'Y		1
90320-10	NH061000	NUT	M6	1
90320-11	135040	POINTER		1
90320-12	135073	SCREW	M4x5	1
90320-13	135012	SHAFT		1
90320-14	PS053500	SPRING PIN	Ø5x35	1
90320-15	135017	UPPER WHEEL SHAFT HINGE		1
90320-16	135066	UPPER WHEEL SHAFT		1
90320-17	135039	BUSHING		2
90320-18	BB620403	BEARING	6204LLU	4
90320-19	135096	UPPER WHEEL	Ø17"	1
90320-20	RR470000	RETAINING RING	R47	4
90320-21	WF083030	FLAT WASHER	M8xØ30	2
90320-22	SR089400	CAP SCREW	M8x16	2
90320-23	135075	WOOD CUTTING BLADE	1/2"x135.5"/3440	1
90320-24	WS080000	LOCK WASHER	M8	4
90320-25	SR060500	CAP SCREW	M6x25	4
90320-26	135105	TIRE		2
90320-27	135097	LOWER WHEEL	Ø17"	1
90320-28	135234	IDLER PULLEY		1
90320-29	NH633801	NUT	1"-14 UNF	1
90320-30	WS630000	LOCK WASHER	1"	1
90320-31	AB135228A	BELT TENSION PIVOT ASS'Y		1
90320-32	135032	TENSION SPRING		1
90320-33	PS031600	PIN	Ø3x16	1
90320-34	135042	ALIGNMENT BLOCK		1
90320-35	994301	BEARING	51201	1
90320-36	AB135225A	MOTOR CONNECTION ASS'Y		1
90320-37	135002	HAND WHEEL		1
90320-38	135003	TENSION ADJUSTMENT BOLT		1
90320-39	ST039200	SELF-TAPPING SCREW	3.5X8	7
90320-40	130233	NUT		1
90320-41	SF059100	PAN HEAD FLANGE BOLT	M5x6	1
90320-42	998627	WORKLIGHT CABLE CLIP	3/16"	2
90320-44	SR089400	CAP SCREW	M8x16	2
90320-45	WF083030	FLAT WASHER	M8x30	2
90320-46	135016	UPPER WHEEL SLIDE BRACKET		1
90320-47	SR060500	CAP SCREW	M6x25	1
90320-48	BR000044	RIVET	3.2x10	8
90320-49	SR060200	CAP SCREW	M6x10	1
90320-50	135004	WINDOW		2
90320-53	135243	PLASTIC PLATE		1
90320-55	135083	UPPER DOOR		1
90320-56	SH060500	HEX HEAD BOLT	M6x25	3
90320-57	WF061310	FLAT WASHER	M6x13	3
90320-58	135051	BRUSH		3
90320-59	SR060500	CAP SCREW	M6x25	1
90320-60	135041	LOCK KNOB		2

PARTS LIST
90-320

PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-61	NL061000	NYLON NUT	M6	7
90320-63	135011	HEIGHT POINTER		1
90320-64	NH081300	JAM NUT	M8	1
90320-65	SH081800	HEX HEAD BOLT	M8x90	1
90320-66	135022	ADJUSTMENT KNOB	M10x20	1
90320-67	135020	ADJUSTMENT KNOB	M10x53	1
90320-68	135028	LOCKING HANDLE	M10	1
90320-69	135030	CAM		1
90320-70	135038	LOCKING MOUNT BLOCK		1
90320-71	620021	HANDLE		1
90320-72	135111	TENSION LEVER		1
90320-73	NH121900	NUT	M12	1
90320-74	135110	TENSION LEVER SHAFT		1
90320-75	SJ080400	SOCKET HEAD SCREW	M8x20	4
90320-76	WS080000	LOCK WASHER	M8	4
90320-77	SR060400	CAP SCREW	M6x20	2
90320-78	135013	COVER		1
90320-79	SS080400	SET SCREW	M8x20	4
90320-80	NH081300	NUT	M8	4
90320-81	135005	LOWER WHEEL SHAFT		1
90320-82	MH135019	MOTOR	1.5HP (7A)	1
90320-83	SR100500	HEX HEAD BOLT	M10x25	1
90320-84	WS100000	LOCK WASHER	M10	2
90320-85	135231	MOTOR BRACKET		1
90320-86	SJ080400	SOCKET HEAD SCREW	M8x20	4
90320-88	SF050200	PAN HEAD FLANGE BOLT	M5x10	2
90320-89	135065	LOCK LEVER NUT		2
90320-90	KS050535	KEY	5x5x35	2
90320-91	SH080402	HEX HEAD BOLT	M8x20(L.H)	2
90320-92	135008	MOTOR PULLEY		1
90320-93	LA440000	V-BELT	A44	1
90320-94	SR060200	SOCKET HEAD BOLT	M6x10	1
90320-95	135072	LOWER DOOR		1
90320-97	WF083030	FLAT WASHER	M8X30	2
90320-98	SR100700	CAP SCREW	M10x35	2
90320-99	NH101700	NUT	M10	1
90320-102	AB135021-C	TRUNNION SUPPORT BRACKET		1
90320-103	WS100000	LOCK WASHER	M10	2
90320-104	WF102325	FLAT WASHER	M10x23	2
90320-112	WF081820	FLAT WASHER	M8x18	4
90320-122	WS080000	LOCK WASHER	M8	4
90320-123	SH089400	HEX HEAD BOLT	M8x16	4
90320-124	SC081600	CARRIAGE BOLT	M8x80	1
90320-126	135120	TABLE	17"x24"	1
90320-127	135010R	TABLE INSERT		1
90320-128	130045	TABLE PIN		1
90320-130	ST049200	SELF-TAPPING SCREW		6
90320-131	SF049200	PAN HEAD FLANGE BOLT	M4X8	2
90320-132	135260	DIGITAL DISPLAY		1
90320-133	135029	SENSOR MOUNT		1
90320-134	SP049400	PAN HEAD BOLT	M4x16	2
90320-135	998627	CORD CLAMP	3/16"	2
90320-136	SR050200	CAP SCREW	M5x10	2
90320-137	WF051210	FLAT WASHER	M5x12	2

MAIN ASSEMBLY CNT'D

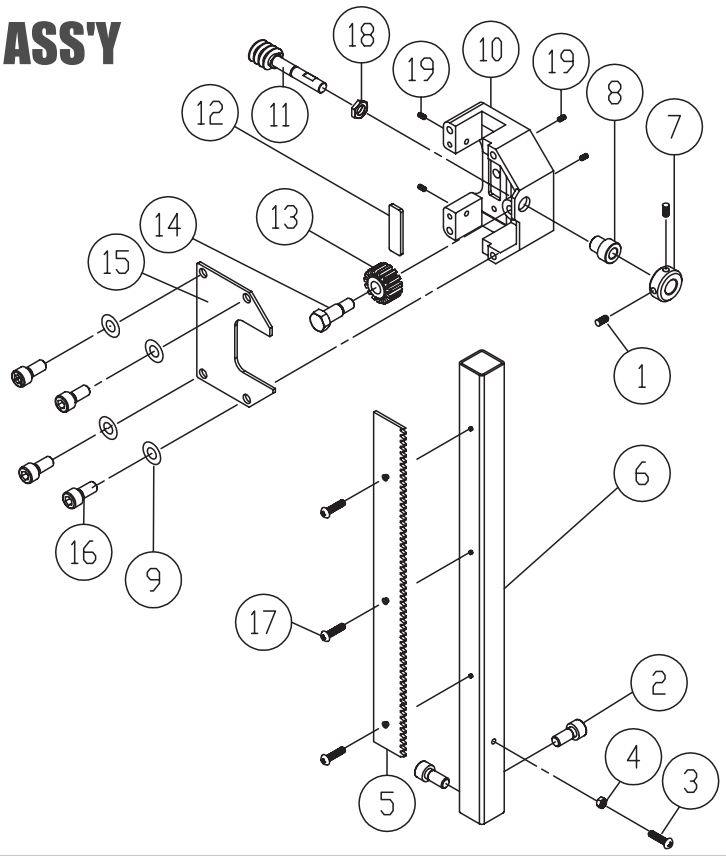
PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-138	135034	PROTECT COVER		1
90320-139	135073	SCREW		1
90320-140	135054	FIBER WASHER		1
90320-141	135037	SLIDING PLATE		1
90320-145	ST059100	SELF-TAPPING SCREW		4
90320-153	WF081818	FLAT WASHER	M8x18	4
90320-158	135006	HAND WHEEL		1
90320-159	SR060400	CAP SCREW	M6x20	1
90320-162	SJ080400	HEX SOCKET BUTTON HEAD SCREW	M8x20	4
90320-163	WS080000	LOCK WASHER	M8	4
90320-164	AB135050	GUIDE BRACKET		1
90320-173	AB198101	MITER GAUGE ASS'Y		1
90320-175	SR060400	CAP SCREW	M6x20	1
90320-176	135067	BUSHING		1
90320-177	998625	CORD CLAMP		2
90320-178	SF050200	SCREW	M5x10	1
90320-179	135258	BEARING MOUNTING PLATE		1
90320-180	SP040200	PAN HEAD SCREW	M4x10	2
90320-181	170736	BLADE HOOK		1
90320-182	200426	LOCK LEVER	M10x33	1
90320-183	LA280000	V-BELT	A28	1
90320-184	135233	PULLEY		1
90320-188	WS100000	LOCK WASHER	M10	3
90320-189	SR100500	HEX HEAD BOLT	M10x25	1
90320-190	SR069400	SET SCREW	M6x16	1
90320-191	135240	HAND WHEEL		1
90320-192	AB135092	UPPER BLADE GUIDE ASS'Y		1
90320-193	AB135095A	LOWER BLADE GUIDE ASS'Y		1
90320-194	SF060200	SOCKET HEAD BOLT	M6x10	2
90320-195	135235	MOUNTING PLATE		1
90320-196	017067	BUSHING		2
90320-199	SR100800	CAP SCREW	M10x35	1
90320-202	SR069400	CAP SCREW	M6x16	2
90320-203	WS060000	LOCK WASHER	M6	2
90320-204	WF061310	FLAT WASHER	M6x_13	2
90320-205	135229	MOUNTING BLOCK		1
90320-206	135223	METAL CUTTING BLADE	1/2"x131.5"/3340	1
90320-207	AB198119	LASER POINTER		1
90320-208	SJ069400	CAP SCREW	M6x16	1
90320-209	SJ069300	BUTTON HEAD SCREW	M6x12	1
90320-210	198129	LASER POINTER BASE		1
90320-211	SJ069400	SOCKET HEAD BOLT	M6x16	1
90320-212	NH061000	NUT	M6	1
90320-214	NH081300	NUT	M8	1
90320-215	198013	HANDLE		1
90320-220	135256	DOOR PAD	t2x10 x 760mm	1
90320-221	135255	DOOR PAD	t2 x 10 x 475mm	1
90320-222	135268	SNAP BUSHINGS	NB-2430	3
90320-223	135270	SNAP BUSHINGS	NB-0813	1
90320-224	998646	NYLON MOVABLE BUSHING	AMB2.4N/ 250mm	1
90320-225	612008	PAD	280mm	1
90320-226	WF102015	WASHER	M10x20	2
90320-227	WF040805	WASHER	M4x8	2
90320-228		ALLEN KEY	8 MM	1
90320-229		ALLEN KEY	5 MM	1

PARTS LIST - 90-320

PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-230		ALLEN KEY	3 MM	1
90320-231		OPEN END WRENCH	10-13 MM	1
90320-232	135281	LIMPID PIECE		1
90320-233	WE050000	STAR WASHER	M5	2
90320-234	AB135222	POWER BOX		1
90320-235	SP059300	PAN HEAD BOLT	M5x12	4
90320-236	990638	WIRING NUT	P2	3
90320-237	WE080000	STAR WASHER	M8	1
90320-238	IC135027-4	POWER CORD	6-15P	1

MAIN ASSEMBLY CNT'D

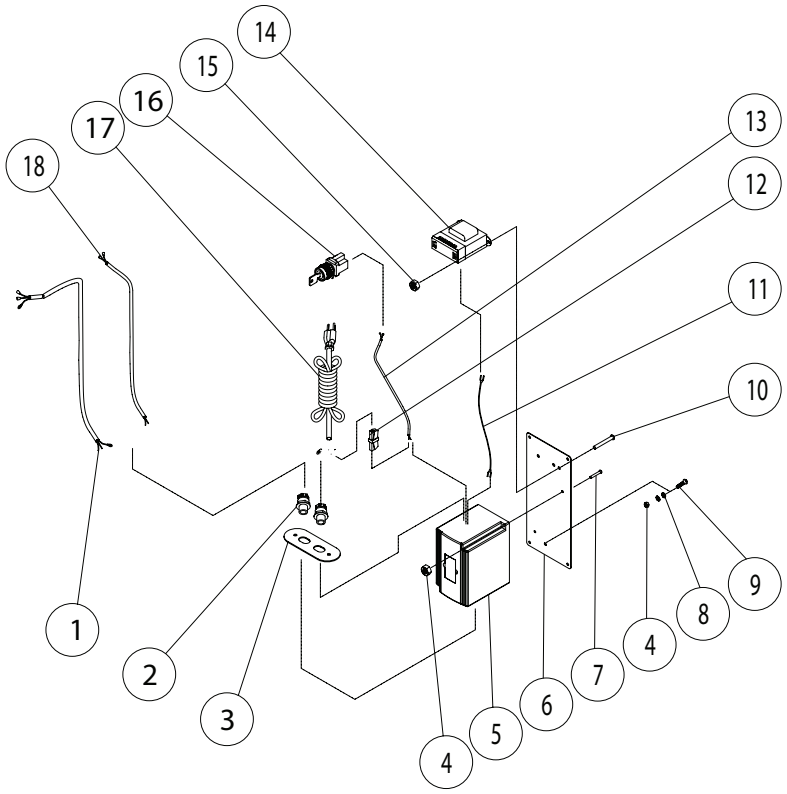
BLADE GUIDE ASS'Y



PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-164-01	SS050100	SET SCREW	M5X5mm	2
90320-164-02	SR069400	CAP SCREW	M6X16mm	2
90320-164-03	SP040200	PAN HEAD SCREW	M4X10mm	1
90320-164-04	NH040700	NUT	M4	1
90320-164-05	135029	RACK		1
90320-164-06	135047	UPPER GUIDE TUBE		1
90320-164-07	135015	LOCATE BUSHING		1
90320-164-08	136453	BUSHING		1
90320-164-09	WS080000	LOCK WASHER	M8	4
90320-164-10	135050	GUIDE BRACKET		1
90320-164-11	135033	WORM SCREW		1
90320-164-12	135062	LOCK PLATE		1
90320-164-13	135049	WORM GEAR		1
90320-164-14	016320	LOCK BOLT		1
90320-164-15	135046	COVER PLATE		1
90320-164-16	SR089400	CAP SCREW	M6*16mm	4
90320-164-17	SN049200	BOLT	M4*8mm	3
90320-164-18	136473	NUT	M16	1
90320-164-19	990306	SET SCREW	M7*10mm	4

BLADE GUIDE ASS'Y

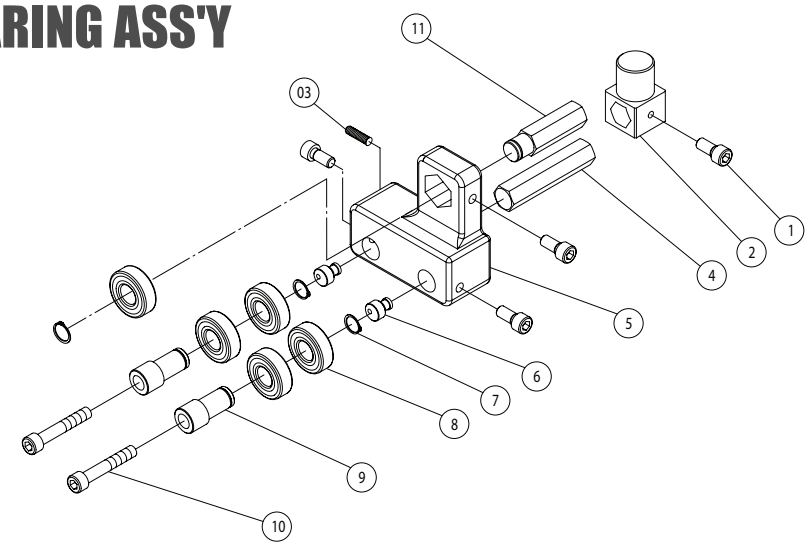
MOTOR CONNECTION ASSEMBLY



PARTS LIST - 90-320

PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-36-01	IM135011-3	MOTOR CORD		1
90320-36-02	998652	STRAIN RELIEF	M16	2
90320-36-03	135081	PLATE		1
90320-36-04	NH051000	NUT	M5	3
90320-36-05	135225	ELECTRONIC INVERTER	220V 2HP	1
90320-36-06	135239	MOUNTING PLATE		1
90320-36-07	SP049400	PAN HEAD BOLT	M5x16	2
90320-36-08	WE050000	SPROCKET WASHER	M5	2
90320-36-09	SF050200	PAN HEAD FLANGE BOLT	M5x10	1
90320-36-10	SP040200	PAN HEAD BOLT	M4x10	2
90320-36-11	IC135032	WIRE		2
90320-36-12	136019	CORD CONNECTOR	224-201	1
90320-36-13	IC135029	LOCK-OUT SWITCH CONNECTION WIRE	14AGW	1
90320-36-14	135269	MOTOR CONTROLLER		1
90320-36-15	NH040700	NUT	M4	2
90320-36-16	994803	LOCK-OUT SWITCH		1
90320-36-17	IC135027	POWER CORD		1
90320-36-18	IC135028	MOTOR FAN CONNECTION WIRE		1
90320-36-19	IM135013-3	MOTOR CORD		1
90320-36-20	IC135037	CONNECTION WIRE	300mm	1
90320-36-21	135239B	MOUNTING PLATE		1
90320-36-22	135275	FUSE HOLDER	£p5x20L-0.5A	1
90320-36-23	990638	WIRING NUT	P2	1
90320-36-24	IC135045	CONNECTION WIRE	100mm	1
90320-36-25	IC135046	CONNECTION WIRE	400mm	1
90320-36-26	IC135051	KEY SWITCH CONNECTION WIRE	14AGWx3C	1
90320-36-27	994883	LOCK-OUT SWITCH	20A	1
90320-36-28	709411	STRAIN RELIEF	PG-11	2

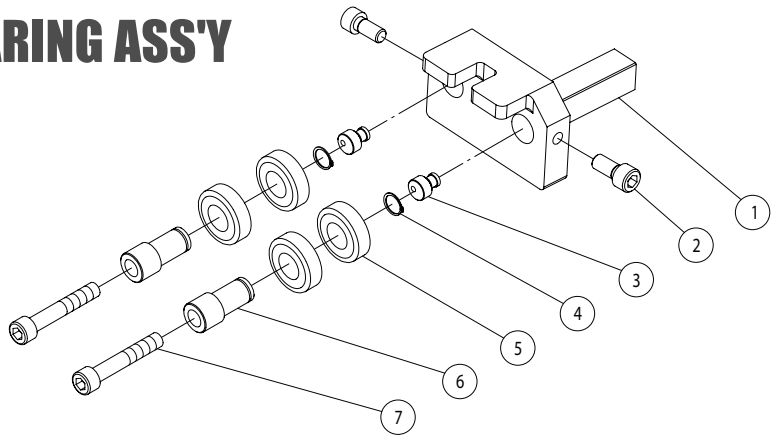
UPPER GUIDE BEARING ASS'Y



PARTS LIST 90-320

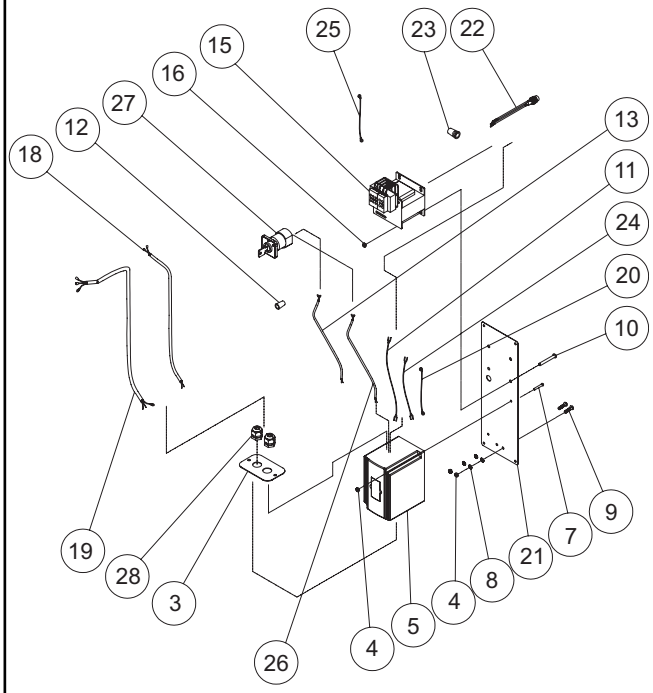
PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-192-01	SR069400	CAP SCREW	M6x16	4
90320-192-02	135057	UPPER GUIDE MOUNTING BLOCK		1
90320-192-03	SS060200	SET SCREW	M6x10	1
90320-192-04	135053	ADJUSTMENT SHAFT		1
90320-192-05	135091	UPPER BLADE GUIDE SUPPORT BLOCK		1
90320-192-06	135090	ECCENTRIC SHAFT		2
90320-192-07	RS150000	SNAP RING	S15	3
90320-192-08	BB620202A	BEARING	6202ZZ	5
90320-192-09	136445	BUSHING		2
90320-192-10	SR060703	CAP SCREW	M6x35	2
90320-192-11	135060	THRUST BEARING ADJUSTMENT SHAFT		1

LOWER GUIDE BEARING ASS'Y

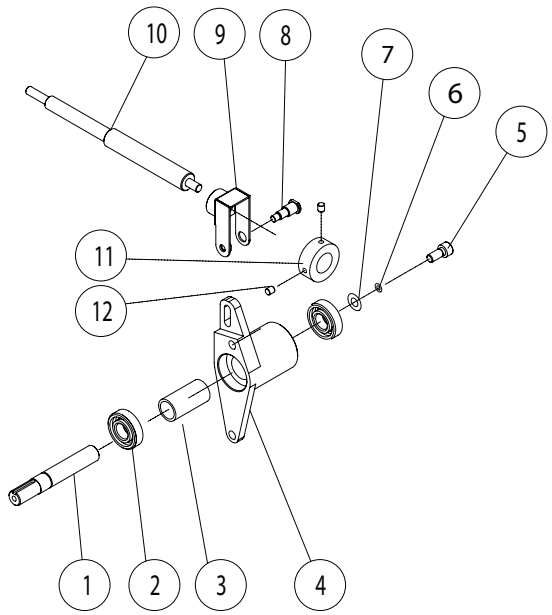


PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-193-01	135125	LOWER BLADE GUIDE SUPPORT BLOCK		1
90320-193-02	SR069300	CAP SCREW	M6x16	2
90320-193-03	135124	ECCENTRIC SHAFT		2
90320-193-04	RS150000	SNAP RING	S15	2
90320-193-05	BB620202A	BEARING	6202ZZ	4
90320-193-06	136445	BUSHING		2
90320-193-07	SR060700	CAP SCREW	M6x35( )	2

SWITCH ASSEMBLY



BELT TENSION PIVOT ASS'Y



PARTS LIST
90-320

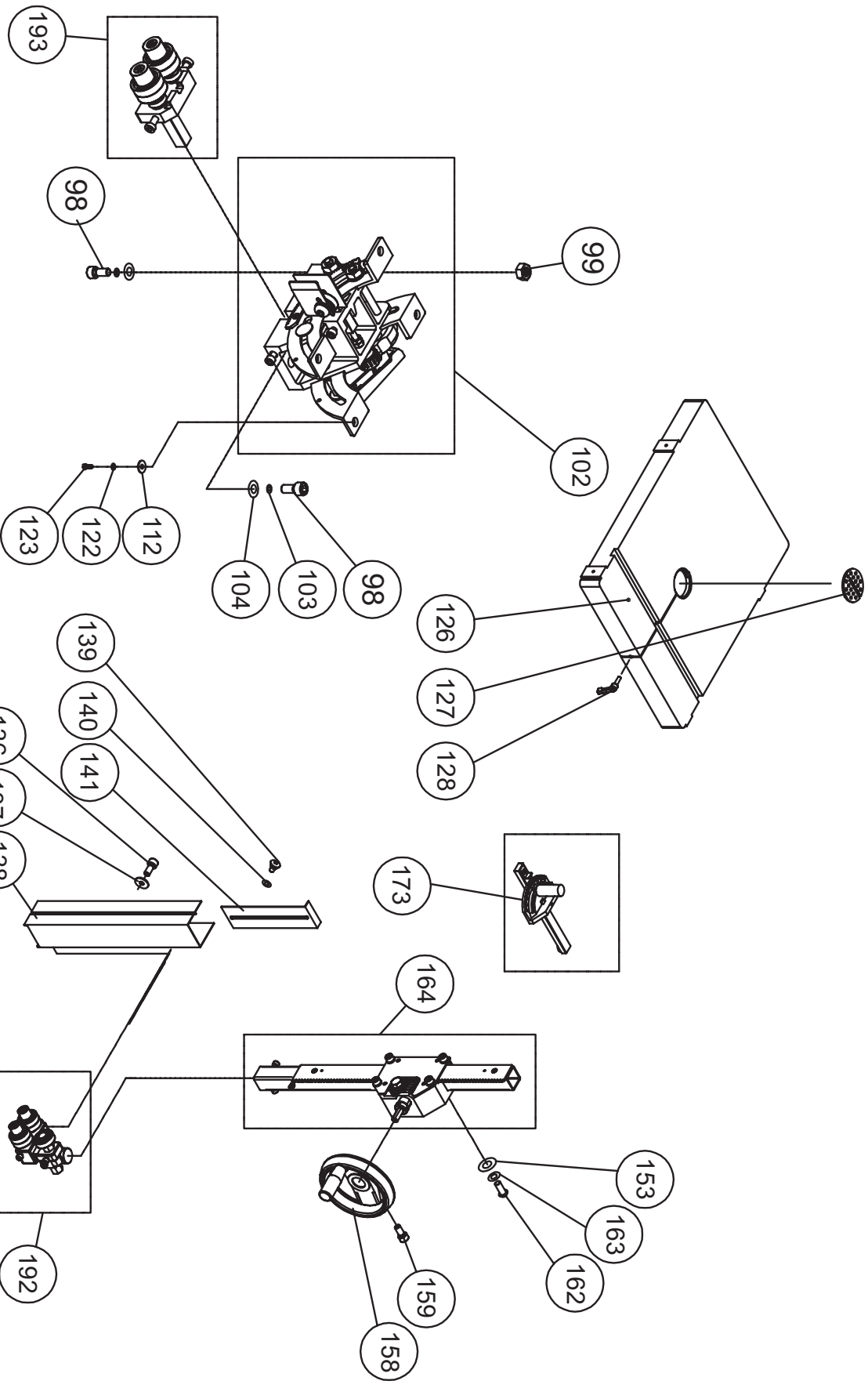
SWITCH ASS'Y

PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-09-01	IC135030	WIRE		1
90320-09-02	994542D	SWITCH	ON/OFF	1
90320-09-03	SP040500	PAN HEAD BOLT	M4x25	2
90320-09-04	135247	SPEED CONTROL KNOB		1
90320-09-05	LM001220	LABEL		1
90320-09-06	135232	SWITCH PLATE		1
90320-09-07	WF081818	FLAT WASHER	M8x_18	1
90320-09-08	135248	ADJUSTABLE RESISTOR		1

BELT TENSION PIVOT ASS'Y

PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-31-01	135238	SHAFT		1
90320-31-02	BB620403	BEARING	6204LLU	2
90320-31-03	135249	BUSHING		1
90320-31-04	135228	BEARING MOUNT		1
90320-31-05	SJ080400	CAP SCREW	M8x20	1
90320-31-06	WS080000	LOCK WASHER	M8	1
90320-31-07	WF083030	FLAT WASHER	M8x30	1
90320-31-08	135227	BOLT		1
90320-31-09	135226	ADJUSTMENT BRACKET		1
90320-31-10	135230	ADJUSTMENT SHAFT		1
90320-31-11	135257	COLLAR		1
90320-31-12	SS050100	SET SCREW	M5x5	2

TABLE ASSEMBLY

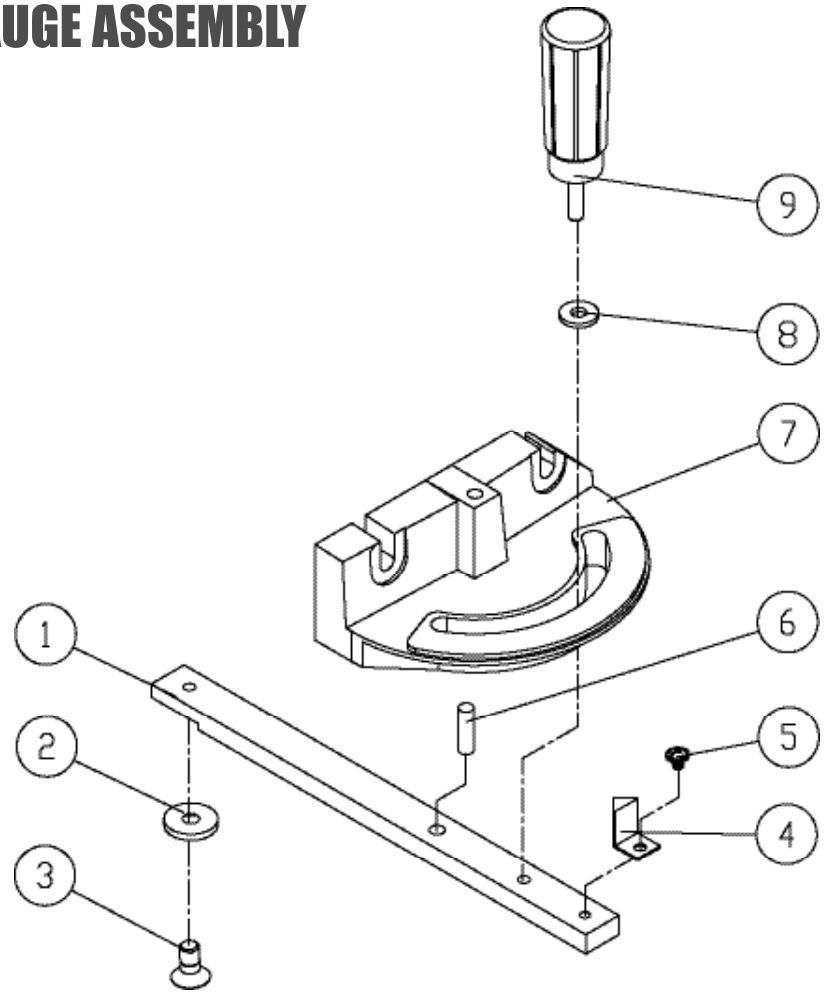


PARTS LIST
90-320

TABLE ASSEMBLY

PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-06	SS050100	SET BOLT	M5x5	1
90320-96	SR100600	CAP SCREW	M10x30	1
90320-98	SR100700	CAP SCREW	M10x35	1
90320-99	NH101700	NUT M10		1
90320-100	135061	SMALL GEAR		2
90320-101	135063	ADJUSTMENT KNOB		1
90320-102	135021	TRUNNION SUPPORT BRACKET		1
90320-103	WF100000	WASHER	M10	1
90320-104	WF102325	FLAT WASHER	M10x_23	2
90320-105	SR069400	CAP SCREW	M6x16	1
90320-106	SR061000	CAP SCREW	M6x50	1
90320-107	135045	ADJUSTMENT BLOCK		1
90320-108	NH061000	NUT M6		2
90320-109	135009	ADJUSTMENT BOLT	M6	1
90320-110	BB600002A	BEARING	6000ZZ	1
90320-111	SC081700	CARRIAGE BOLT	M8x85	1
90320-112	WF081820	FLAT WASHER	M8x_18	4
90320-113	WF081820	FLAT WASHER	M8x_18	2
90320-114	SP049100	PAN HEAD BOLT	M4x6	4
90320-115	135052	GEAR PLATE		2
90320-116	NL081300	NYLON NUT	M8	2
90320-117	SP049100	PAN HEAD BOLT	M4x6	1
90320-118	135044	LOCK LEVER		1
90320-119	WF040808	FLAT WASHER	M4x_8	2
90320-120	135078	POINTER		1
90320-121	135025	TRUNNION		2
90320-122	WS080000	LOCK WASHER	M8	4
90320-123	SH089400	HEX HEAD BOLT	M8x16	4
90320-124	SC081600	CARRIAGE BOLT	M8x80	1
90320-126	135120	TABLE17"x24"		1
90320-127	135010R	TABLE INSERT		1
90320-128	130045	TABLE ALIGNMENT PIN		1
90320-136	SR050200	CAP SCREW	M5x10	2
90320-137	WF051210	FLAT WASHER	M5x_12	2
90320-138	135034	BLADE GUARD		1
90320-139	135073	SCREW		1
90320-140	135054	FIBER WASHER		1
90320-141	135037	SLIDE PLATE		1
90320-153	WF081818	FLAT WASHER	M8x_18	4
90320-154	SP040200	PAN HEAD BOLT	M4x10	1
90320-155	NH040700	NUT	M4	1
90320-156	135029	RACK		1
90320-157	135047	UPPER GUIDE TUBE		1
90320-158	135006	HAND WHEEL		1
90320-159	SR060400	CAP SCREW	M6x20	1
90320-160	135015	BUSHING		1
90320-161	135043	BUSHING		1
90320-162	SJ080400	SOCKET HEAD BOLT	M8x20	4
90320-163	WS080000	LOCK WASHER	M8	9
90320-164	135050	GUIDE BRACKET		1
90320-165	135033	WORM SCREW		1
90320-166	135062	LOCK PLATE		1
90320-167	135049	WORM GEAR		1
90320-168	016320	LOCK BOLT		1
90320-169	135046	COVER PLATE		1
90320-170	SR089400	CAP SCREW	M8x16	4
90320-171	SN049200	BOLT	M4x8	3
90320-172	SR069400	CAP SCREW	M6x16	2
90320-173	AB198101	MITER GAUGE ASS'Y		1
90320-174	136473	NUT		1
90320-192	AB135092	UPPER GUIDE BEARING ASS'Y		1
90320-193	AB135095A	LOWER GUIDE BEARING ASS'Y		1
90320-216	135122	LEFT COVER		1
90320-217	135123	RIGHT COVER		1
90320-218	SJ100600	SOCKET HEAD BOLT	M10x30	1
90320-219	WF102025	WASHER	M10x_20	1

MITER GAUGE ASSEMBLY



PARTS LIST
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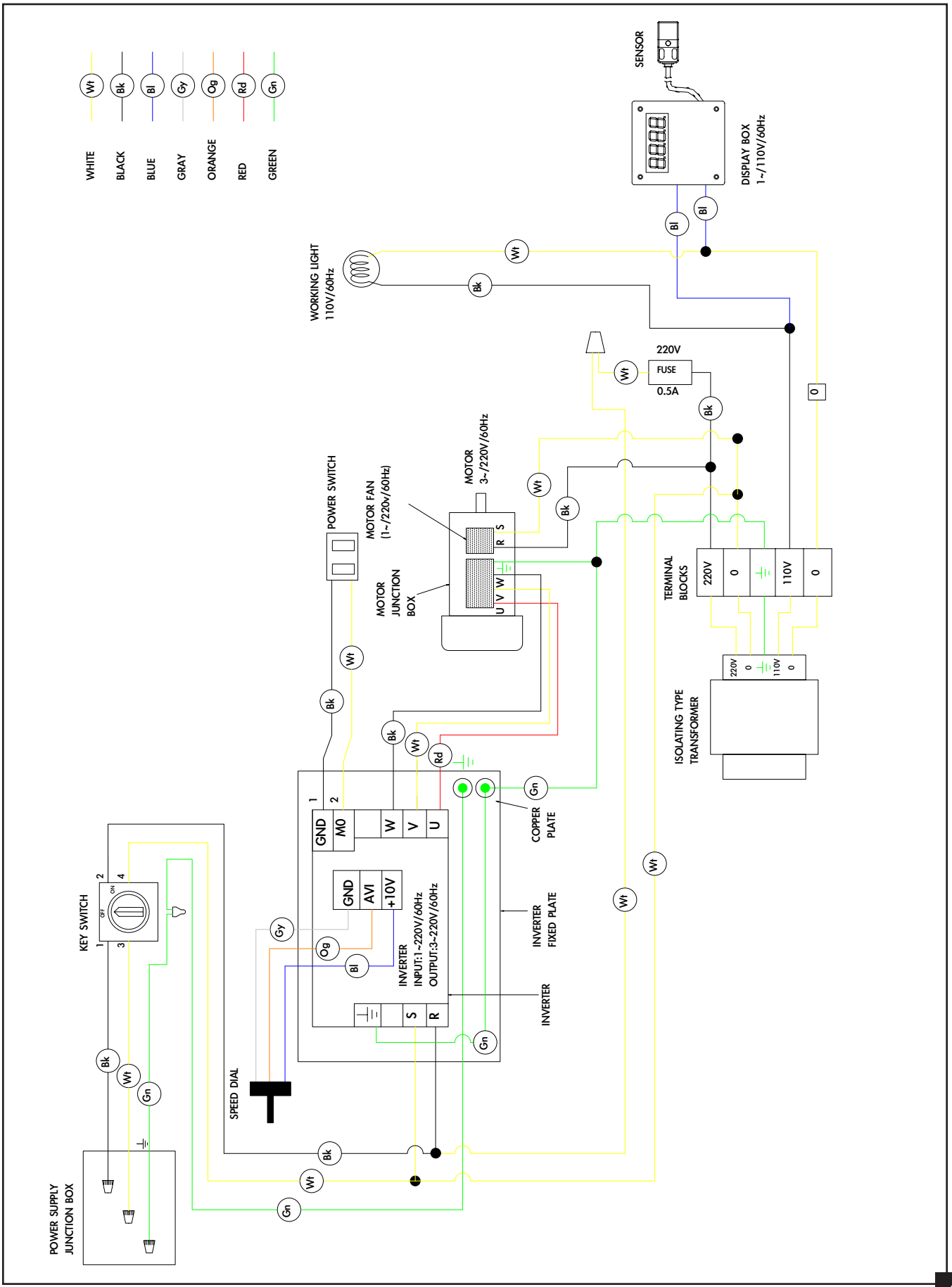
PART NO.	REF. NO.	DESCRIPTION	SPECIFICATION	QTY
90320-173-01	198101	GUIDE BAR		1
90320-173-02	198102	GUIDE WASHER		1
90320-173-03	SN069200	COUNTER SUNK BOLT	6*6mm	1
90320-173-04	198103	POINTER		1
90320-173-05	SF059200	SCREW	M5*8mm	1
90320-173-06	198107	PIN	Ø6.5*10	1
90320-173-07	198106	MITER GAUGE BODY		1
90320-173-08	198104	NYLON WASHER		1
90320-173-09	198105	HANDLE		1

WIRING DIAGRAM



MODEL 90-320

8360 Champ-d'Eau, Montreal (Quebec) Canada H1P 1Y3

Tel.: (514) 326-1161
Fax: (514) 326-5565 - Parts & Service / Fax: (514) 326-5555 - Order Desk

orderdesk@general.ca
www.general.ca

IMPORTANT

When ordering replacement parts, always give the model number, serial number of the machine and part number. Also a brief description of each item and quantity desired.